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COLONIAL AND FOREIGN TRADE.

NEXT week extra copies of THE CHEMIST AND DRUGGIST will be sent to druggists and drug-firms in India, Burmah, Ceylon, Straits Settlements, China, Japan, South Africa, and the West Indies. Advertisers will note that we have exceptional facilities for placing their advertisements in these countries, as, through our resident agents and other means our registers are periodically checked. It is on the recently revised list that next week's circulation is based, and we feel satisfied that the opportunity for special announcements is a good one for the enterprising. Immediate application for space should be made to the publisher.

INCREASE OF SPIRIT-DUTY.

POSTCARDS INVITED.

IN view of the proposed increase of the spirit-duty by 6d. per proof gallon, and the consequent increased taxation of the dispensers and retailers of medicines, who cannot recoup themselves by increased prices, subscribers to THE CHEMIST AND DRUGGIST are requested to assist the Editor in protesting against the tax by supplying him on postcards with the subjoined particulars:—

Quantity of Rectified Spirit bought and used in 1893.
Quantity of Tinctures and Perfumes bought and used in 1893.
Other Spirituous Preparations bought and used in 1893.

An approximate estimate in proof gallons is what will be preferred.

The information thus supplied will only be used in the aggregate, and not in association with the names of those who supply it. For particulars of the proposed increased duty see the Editorial Note on page of this issue.

POSTCARD COMPETITION.—B.P. RHYMES.

THE postcard competition for April is to be—

The best rhymed verse of from two to six lines (any metre) presenting in an easily-remembered style some formula, description, or test of some article or preparation of the British Pharmacopœia.

All subscribers, their families, and their assistants may compete. Rhymes in competition must be sent on postcards, and must reach us not later than April 30.

One guinea for the best, and extra prizes if the verses sent in seem worthy of further awards. The Editor's decision to be final.

Summary.

THE death in prison is reported of a chemist who was undergoing sentence for fraud (p. 534).

WE give the names of those who have passed the Major and Minor at Edinburgh this month (p. 550).

A YOUNG chemist's assistant, at Torquay, died on Tuesday last from the effects of prussic acid which he had taken (p. 535).

THE wife of a chemists' traveller who keeps a herb-shop, was a witness at an inquest on a girl who died after taking pennyroyal (p. 535).

WE report a case from York in which a druggist (limited) was fined for the sale of olive oil, which was proved to be adulterated (p. 534).

M. GRIMAU, who has made some important researches on the constitution of morphine and other alkaloids, has been elected a member of the Paris Academy of Sciences (p. 536).

IN our poison-list this week are three deaths due to carbolic acid, two to chlorodyne, and two to morphia. A young surgeon in Manchester is one of the morphia victims (pp. 534-535).

THERE is little of a brilliant character under "Winter Session" this week; but we give in full on p. 543 a bright paper by Mr. Harold Wyatt, jun., on his personal experience of French pharmacy.

THE Pharmaceutical Society have succeeded in getting another patent for a poisonous medicine revoked, and they are also taking action against a patent granted to Messrs. Kay & Shaw, of Stockport (p. 541).

THE Leeds Magistrate has dismissed the summons against the chemist who was prosecuted for selling chlorodyne alleged to have contained prussic acid, without registering the sale (p. 541). Mr. Davenport writes to correct our previous report (p. 559).

THE condition of the German trade in fine chemicals and synthetic dyes which was somewhat gloomy last year has lately improved very materially. On p. 548 we give statistics showing the present condition of affairs and the volume of business done in 1893.

IT will be seen from information under our market report that the proposed Canadian Tariff is already in force, although, of course, the Bill has not yet been passed by the Legislature. Several important reductions in pharmaceutical articles are included in the measure.

THE chemists of Melbourne have taken active steps to protect their interests as threatened by unqualified traders, and in our Australian notes on p. 537, we give particulars of their resolution, and its immediate results, as well as other interesting items from the Antipodes.

THE extra 6d. of duty upon the proof gallon of spirit we regard as a tax which will press unduly upon retail chemists, and we ask them to assist us in getting this view of the matter placed before the authorities (p. 546). We give on p. 554 some trade particulars regarding the revised tax.

MANY of the students in our analytical competition this month have been tripped up by the most common obstacle to young analysts—a mixture of alum and calcium phosphate. Mr. Moss, in his report on the next page, gives some useful hints about the treatment of such mixtures (p. 532).

WE print in this issue the awards to colonial and foreign competitors who returned their DIARY Coupons (p. 544). We also conclude our report on the Liver-pills Advertisement Competition (p. 552); and in regard to this we take the opportunity of making some comments upon the advertising of specialities (p. 547).

BUSINESS is generally reported to be slightly more active in the drug and chemical trade. The principal event of the week has, of course, been the increase in the spirit duties, which has caused corresponding advances in all spirituous medicinal preparations. There are few alterations in prices; cod-liver oil is momentarily weaker, and cocaine has been reduced.



CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

QUALITATIVE ANALYSIS.

THE subject of the next exercise in qualitative analysis will be a mixture of not more than three salts. The mixture is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Wednesday, April 25, and the samples will be forwarded immediately. It should be understood that in this, as in all other competitions, THE CHEMIST AND DRUGGIST recognises no distinction of sex.

Students' reports will be received up to Saturday, May 5. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts of which the mixture is composed.

REPORTS.

The mixture of salts sent out last month consisted of 2 parts of ammonium alum, 2 parts of calcium phosphate, and 1 part of potassium iodide. Its calculated composition was:—

Al	..	..	..	..	..	2.42
Ca	..	..	..	..	..	15.48
K	..	..	..	..	..	4.69
NH ₄	..	..	..	..	..	1.59
I	..	..	..	..	..	15.31
P ₂ O ₅	..	..	..	..	..	24.52
SO ₃	..	..	..	..	..	16.94
H ₂ O	..	..	..	..	..	19.05
						<u>100.00</u>

It contained slight traces of iron and chlorine.

The number of packets of the powder issued to correspondents this time was 77, and 49 reports were sent in. The failures in the detection of the several constituents of the mixture were:—Ammonium, 17; calcium, 14; phosphoric radicle, 10; aluminium, 7; potassium, 5; sulphuric radicle, 3; iodine, 1.

The quantity of ammonium present was small, but it was quite sufficient to admit of its detection with ease and certainty. Failures were due, in most cases, to the adoption of a bad method. Boiling with a solution of caustic alkali does very well as a rough test, dealing with large quantities or with single salts; but for the detection of such quantities as may occur in mixtures of several salts, the test is of very little use. The inexperienced student generally boils away nearly all the ammonia, and then tries ineffectually to detect the trace that remains. It is better to proceed in an entirely different way. Ammonium is very soluble in water; consequently, the less water that is present to interfere with the volatilisation of the ammonia the better. For this reason a solid reagent is to be preferred, and calcium hydrate answers the purpose very well. Soda lime, such as is used in organic analysis, is even better. The mode of applying the test is sufficiently indicated in our remarks to correspondents. It is scarcely necessary to add that the piece of test-paper employed should not be large, because it is

undesirable that the effect of the ammonia should be weakened by distributing it over a large surface.

Calcium escaped detection because it was present in the form of phosphate. So soon as the acid employed to dissolve the powder was neutralised by the addition of an alkali, the calcium phosphate was precipitated. Some of our correspondents thought the precipitate obtained in this way consisted solely of aluminium hydrate, and as ammonium carbonate gave no precipitate in the filtrate they concluded that calcium was absent. Whenever the neutralisation of the acid employed to dissolve the substance under examination results in the formation of a precipitate, it becomes a matter of importance to ascertain whether the precipitate contains a phosphate, oxalate, or other similar salt soluble only in acid solutions. If the precaution has been taken to destroy organic matter by ignition, the salt most likely to occur is a phosphate. For this reason the precipitate should always be examined for phosphoric acid. If it is detected, the next step is to remove it. For this purpose precipitation in the form of ferric phosphate is generally resorted to. In carrying out this operation it must be remembered that the presence of a free mineral acid is not admissible, but free acetic may be present, as it does not dissolve ferric phosphate; moreover, it is required to prevent the precipitation of calcium in the form of a basic phosphate. It is in the substitution of acetic acid for the mineral acid present—usually hydrochloric acid—that the operation generally fails in the hands of the student. In order to ensure success the method must be studied by operating upon solutions of known composition, before attempting to put it into practice on substances of unknown composition.

PRIZES.

The First Prize for the best analysis has been awarded to
ARTHUR M. THORPE, 7 Bridge Street, Spalding, Lincs.

The Second Prize has been awarded to
S. WILD, Springfield house, New Mills.

MARKS AWARDED FOR ANALYSES.

A. M. Thorpe (1st prize)	..	100	Ulexine	..	..	..	80
S. Wild (2nd prize)	..	99	Frango	..	..	..	78
Harold Read	..	98	Dauwer	..	..	..	76
Zymine	..	97	H. C. Goodall	..	..	..	75
Cono	..	96	Autos	..	..	..	74
A. Thorpe	..	96	S. Riley	..	..	..	72
H. Bowden	..	96	Hopeful Secundus	..	..	..	70
H. F.	..	95	Kalium	..	..	..	67
Platinum	..	95	Vectis	..	..	..	65
A. W. Jones	..	95	N. M.	..	..	..	65
W. S.	..	95	Rubrough	..	..	..	63
Campanulate	..	94	Ero	..	..	..	62
G. D. Roberts	..	94	P. Harris	..	..	..	61
Cambria	..	93	Alpha	..	..	..	60
Aristocrat	..	93	Glycol	..	..	..	57
Æsculap	..	92	J. E. Schofield	..	..	..	55
The Skunk	..	91	H. K.	..	..	..	52
Carolus	..	89	D. W. C.	..	..	..	50
Timothy	..	87	Endymion	..	..	..	48
H. Bridges	..	86	Crystal	..	..	..	46
Bête Noire	..	85	Hopeful	..	..	..	45
W. Palmer	..	85	R. T. S.	..	..	..	32
M. J. P.	..	83	J. Russell	..	..	..	20
Succin	..	83	W. Blakeley	..	..	..	10
R. Wilson	..	82					

TO CORRESPONDENTS.

Prizes.—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half a guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

Note.—All communications should include the names and addresses of the writers.

S. WILD.—It is not necessary to examine the powder for alkaloids, or for any substance that does not occur as a constituent of salts.

BETE NOIRE.—The portion of the powder insoluble in water consisted of calcium phosphate, and if you had succeeded in separating the phosphoric radicle in combination with iron, ammonium carbonate added to the filtrate would have given a precipitate of calcium carbonate. It is difficult to say from your description what was the cause of your failure. There are certain precautions to be observed in the removal of the phosphoric radicle which you will soon learn if you study the method experimentally.

W. PALMER.—The residue left when the powder was strongly heated was not suited for the examination for ammonium, because you had volatilised ammoniacal compounds.

M. J. P.—You say you heated the powder with calcium hydrate, and failed to detect any evolution of ammonia. This was not the way to apply the test. When a very small portion of the powder was mixed with dry calcium hydrate in a watch-glass, and then very slightly moistened, so as not to be visibly wet, the ammonia evolved was easily detected by smell. When a glass cover with a piece of red litmus-paper adhering to the underside was placed over the watch-glass, the ammonia quickly turned litmus-paper blue.

SUCCEIN.—See remarks to M. J. P.

ULEXINE.—The phosphoric radicle was the chief constituent of the mixture, as you will see from the above figures. If you had used enough of the molybdic solution a copious yellow crystalline precipitate would have been produced. Remember that the molybdic solution must be in decided excess, because certain phosphates dissolve ammonium phosphomolybdate. For this reason it is best to take a small quantity of the molybdic solution in a test-tube, and to add the solution to be examined drop by drop, keeping the reagent always in excess.

FRANGO.—It would appear that when you added ammonium hydrate to nearly neutralise the solution from which you desired to separate the phosphoric acid you employed too much of the alkali, and thus precipitated the aluminium as hydrate along with the ferric phosphate.

DANVER.—You should have separated the phosphoric radicle from the portion of the powder insoluble in water. Without this separation it was not possible to make a satisfactory analysis. You did not examine the precipitate produced by ammonium hydrate in the aqueous solution for anything but iron. It contained the aluminium as hydrate.

H. C. GOODALL.—You omitted to mention the means you adopted to detect potassium.

AUTOS.—Very little sodium suffices to obscure the flame-coloration of a relatively large quantity of potassium, but if you use a blue glass, opaque to the yellow rays of sodium, the violet coloration of potassium is easily detected.

S. RILEY.—From the description you give of your test for aluminium it is difficult to make out what you actually did. Aluminium should have been sought for in the solution freed from the phosphoric radicle.

HOPEFUL SECUNDUS.—You omitted to mention how you had prepared the solution for examination for the acids. A great deal depended upon the detection of the phosphate, because its presence necessitated the adoption of a special method of analysis.

KALIUM.—The precipitate thrown down by ammonium hydrate contained the calcium as phosphate, as well as the aluminium as hydrate. The precipitate, therefore, required special treatment; for the course to be adopted we must refer you to your text-book.

VECTIS.—Considering the quantity of phosphate present, and its influence on the method to be adopted, your omission was a serious one. See remarks to "Ulexine."

N. M.—It is probable that you precipitated the calcium as phosphate owing to the use of too little ferric chloride and an insufficiency of free acetic acid.

RUBROUGH.—You must not omit to send your name with every communication. A mixture of salts containing the constituents you detected would have dissolved in water, and though you said nothing about it you must surely have noticed that the powder was not soluble in water.

EXO.—The black precipitate which you thought contained nickel was simply ferrous sulphide. The filtrate would have given a precipitate with ammonium carbonate if the separation of the phosphoric radicle had been properly carried out.

ALPNA.—So far as it went, your work was good, and showed a great improvement. You said nothing about either potassium or ammonium.

GLYCOL.—You made no attempt to detect either potassium or ammonium.

J. E. SCHORFIELD.—The powder could not have had the composition you mention because it was not soluble in water. You have not studied the calcium-hydrate test for ammonium. Heat is only necessary when the quantity to be detected is very minute. See remarks to "M. J. P."

H. K.—You added ammonium acetate and then ferric chloride to the hydrochloric-acid solution of the powder, and on warming you obtained no precipitate of ferric phosphate. This must have been because free hydrochloric acid was present. You did not use enough ammonium acetate to convert all the free hydrochloric acid into ammonium chloride, leaving acetic acid as the only free acid present. Unless this result be attained no ferric phosphate can be precipitated, because it is soluble in free hydrochloric acid.

D. W. C.—Sulphuric acid was a strange solvent to employ: you should have dissolved the powder in dilute hydrochloric acid. You examined the

part soluble in water for phosphates; it was the insoluble part that should have been examined, as you had reason to suppose from the preliminary examination that calcium was present.

ENDYMION.—You say the powder "was entirely soluble in water." How you could have come to such a conclusion passes comprehension. It is true that the three salts you finally concluded to be present would yield a soluble mixture, but surely this could not have influenced your opinion on so simple a matter of fact.

CRYSTAL.—You dissolved some of the powder in dilute hydrochloric acid, added ammonium chloride and hydrate, and obtained a precipitate. Some of this you dissolved in nitric acid, and added ammonium molybdate, but obtained no precipitate, probably for the reasons referred to in the remarks to "Ulexine." You took another portion of the precipitate, dissolved it in dilute hydrochloric acid, and added sodium hydrate, but obtained no precipitate. If the alkali had been added in excess such a result would be impossible; if it had not been added in excess the experiment was useless.

HOPEFUL.—Your explanation of the insolubility of part of the powder was not supported by any evidence.

R. T. S.—The colour of the ether solution was due to iodine. If you want to distinguish between bromine and iodine, carbon bisulphide is a better solvent to employ, as iodine dissolves in it with a violet colour, while bromine yields a brown solution.

J. RUSSELL.—You should repeat the work on a similar mixture of salts which you can easily prepare.

W. BLAKELEY.—You want practice. Study the reactions experimentally; do not be satisfied with merely reading about them.

English News.

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Fertilisers and Feeding-stuffs Act, 1893.

The West Riding County Council (Yorks) have decided, subject to the approval of the Board of Agriculture, to appoint Mr. Thomas Fairley, of Leeds, the district agricultural analyst for the county of the West Riding, the remuneration to be 10*l.* 10*s.* per annum, and the following fees, viz:—
(a) For each sample analysed at the request of a purchaser for consumption, 10*s.* 6*d.* for a full analysis, and 5*s.* for a single determination; of such fees, 5*s.* and 2*s.* 6*d.* respectively shall be paid by the purchaser, and the balance by the County Council. (b) For each sample analysed at the request of a wholesale trader, 2*l.* 2*s.* for a full analysis, and 1*l.* 1*s.* for a single determination, the whole of which fees shall be paid by the person requiring the analysis. (c) For each sample taken by the analyst or his approved deputy at the request of vendor or purchaser, 10*s.* 6*d.* and third-class railway fare.

Selling Patent Medicines without a Licence.

At the Ruabon Petty Sessions on April 13, Joseph Henry Thomas, Rhos, was summoned by the Commissioners of Inland Revenue for selling a patent medicine without a licence. Mr. Murta, supervisor, said defendant had had a licence, but did not renew it in September of last year. An officer called and asked him to renew it, and he promised to do so. The licence was not taken out, and on February 7 a box of pills was bought from the defendant. The penalty was up to 20*l.*, and he might mention that the licence-duty was only 5*s.* The defendant admitted the offence. He said that he had been in the habit of selling a few patent medicines for three or four years. In September of last year he had sold all his stock, and did not renew his licence. Afterwards he came across two boxes of pills, and it was for selling one of those that he was summoned. The defendant was fined 1*s.*, and costs were remitted. Joseph is not a chemist.

Arsenic-poisoning in Paper-mills.

An inquiry into the cause of the death of Tom Fox, of Wood Street, and Henry Battersby, of Duke Street, Glossop, who met their death from arsenic-poisoning whilst following their employment in the chemical department of the Dover Paper-mills, Glossop, was concluded on April 13. It appeared that deceased had been engaged in boiling hydrochloric acid for the manufacture of tinfoil-paper, and had died from inhaling arsenic fumes. Two other workmen who

had been ill from the same cause gave evidence as to assisting in the boiling of the acid and tin. The jury found that the men died from the effects of arsenic-poisoning, caused by inhaling the fumes of the acid, which contained an excessive quantity of arsenic, which ought not to have been sent out by the Alkali Company in that condition. They further recommended that in future each vessel should be filled separately and covered before another was filled, and that the men engaged in boiling acid should be provided with respirators.

A Chemist Dies in Wandsworth Prison.

At Wandsworth Prison, on April 10, Mr. Braxton Hicks held an inquiry into the death of George Edward Clive Griffin, aged 53, formerly a chemist, residing in Somerleyton Road, Brixton, who was undergoing two consecutive terms of five months' hard labour for fraud, after a previous conviction for misdemeanour. He was not fit for first-class hard labour, so was employed in distributing the library-books. He was admitted to the infirmary on March 20, and died there on April 7. The widow informed the Coroner that when she visited her husband at Christmas he complained of the thinness of the blankets that were supplied to him. Griffin had made no complaint to the authorities, and Dr. Quinton explained that the temperature of the cell was such that the deceased could not have felt the cold. Dr. Quinton attributed death to broncho-pneumonia, and the jury returned a verdict of death from natural causes.

Carbolic Poisonings.

A woman named Elizabeth Heffron (35), the wife of John Heffron, a cotton-piecer, living at Salford, had been drinking heavily for the past three months. During the absence of her husband from home on Tuesday evening of last week, she gave a neighbour's child a penny and asked her to fetch a pennyworth of carbolic acid from the shop of Mr. Bullock, a neighbouring chemist. She told the child to tell the chemist that the acid was required for poisoning rats. Mr. Bullock would not serve the girl, but she obtained the poison at another place in Regent Road, and gave it to Mrs. Heffron, who poured the liquid out of the bottle into a basin and drank it. The woman at once became insensible, and died very shortly afterwards.

George Pope (50), decorator, of Fairbridge Road, Holloway, had been ill a considerable time, when, on March 28, his wife found him insensible in bed. A bottle containing carbolic acid was at his side. He was removed to the Great Northern Hospital, where he slowly recovered. Mr. Lane, at the North London Police Court, advised the wife to look well after the defendant, who was discharged on his own recognisances to come up for judgment if called upon.

Mary Ann Lewis (21), married, of 34 Barnsbury Grove, was charged on Monday at the Clerkenwell Police Court with attempting to commit suicide by drinking carbolic acid. On Sunday evening last a police constable was called to the prisoner. He administered an emetic and she recovered. It was stated that there had been a quarrel in the house between her husband and her brother. The prisoner had only been married two months. Dr. Case, who attended the Court, said the constable saved Lewis from a serious illness by his prompt action. The prisoner was discharged with a caution.

A painter named Richard Reid, of 83 Edith Road, West Kensington, drank some carbolic acid and glycerine from a bottle with fatal effect on Thursday of last week. He had been out of work and this caused him to become depressed. The bottle containing the poison had been left in the house by a previous tenant.

Drug-contract.

The Gravesend Town Council have appointed Mr. J. H. Morris as contractor for the supply of chemicals and sanitary requisites at schedule prices.

The Half-holiday.

The chemists of Saltash (Cornwall), Gravesend (Kent), and Midhurst (Sussex) are closing on Wednesday afternoons. The chemists of Billingham have adopted Thursdays.

Deaths from Chlorodyne.

At Taunton, near Ashton-under-Lyne, on Saturday last, at inquiry was held as to the death of Amy Baron, the wife of a publican, who was found unconscious in bed, dying in spite of medical attendance the same day. A bottle of chlorodyne was on the mantelpiece in the room, and it was found that death was due to an overdose of that drug.

Thomas Kelsey (44), a stoker in the navy, recently returned from a long cruise, had been drinking. He was found in bed breathing heavily, and under his pillow was discovered a bottle labelled "Chlorodyne." An emetic was administered, and he was taken to the hospital, but did not recover. The Coroner questioned Dr. Morley as to the habit amongst seamen of taking the drug to make them sober after drinking, but the doctor had never heard of it, and the jury returned a verdict of death through misadventure.

Rapeseed Oil for Olive Oil.

At the York City Police-court on April 16, Edward Baynes, described as a druggist (but not on the Register), of Parliament Street, York, was summoned under the Sale of Food and Drugs Act for selling on March 8, to Mr. J. Atkinson, inspector, 1 lb. of "olive oil," which was certified to be rape oil. The defendant trades as Baynes (Limited), and the inspector went to his shop and asked the price of olive oil. Defendant gave him a price, and witness then asked if he had any cheaper. Defendant said he had some olive oil at 10d. a pint, and witness asked for a pint, for which he handed a pitcher to defendant. Mr. Baynes gave the pitcher to a youth, who then disappeared to the back of the shop, and returned with the oil. The certificate of the analyst showed that the oil sold as olive oil was rapeseed oil. Mr. Atkinson added that about a fortnight afterwards he again visited the shop, and told defendant that the oil he had sold him had been certified by the public analyst to be rapeseed oil. Defendant then showed witness a can labelled olive oil, out of which he said the oil supplied to witness had been taken. Defendant said that he did not know that the oil was not olive oil, and should hold the firm which supplied it responsible.—Cross-examined, he (Atkinson) said he did not, when he bought the oil, hear the defendant say that it was not for table use. He might have said so. Mr. Robert Catley, deputy medical officer for the city, said that olive oil was a drug, and often used instead of cod-liver oil and castor oil.

Mr. E. T. Wilkinson, who appeared for the defendant, admitted that rapeseed oil had been sold to the inspector instead of olive oil. Mr. Baynes did not know that the oil was rapeseed, and he did not therefore, as the summons stated, wilfully supply rapeseed oil instead of olive oil. To secure a conviction, it must be proved that the defendant had wilfully supplied an article other than demanded.

The Town Clerk, for the prosecution, then applied to amend the summons, as it was not correct, by striking out the word "wilful." The summons was amended accordingly.

Defendant deposed that when he supplied the oil to the inspector, he was under the impression that he was selling olive oil. He had two qualities of olive oil, and when he supplied the inspector with the cheaper quality he told him that it was not for table use. The oil was suitable for machinery, &c. On the inspector informing him that the oil he had sold was not olive oil, but rapeseed oil, he complained to a local firm from which he thought he had received the oil, but it was afterwards found that the oil had been taken from a stone bottle which was used for olive oil, but which then contained rapeseed oil. The olive-oil store-bottle had been filled from a Winchester bottle, and it was the duty of his assistant, a qualified chemist, to see that the bottles contained their proper oils. The assistant had been dismissed for carelessness, as he ought to have seen that the bottle contained nothing other than olive oil.

David Murray, apprentice, corroborated, and said that on the day previous to the inspector's visit he filled the olive-oil store-bottle from the Winchester bottle. On the inspector's first visit he heard Mr. Baynes tell the inspector that the oil was not for table use.

Mr. Wilkinson said that the oil could hardly be called a drug, and was not sold for food, as Mr. Baynes had told the inspector that it was not for the table. Mr. Baynes had sold the oil, fully believing that it was olive oil. The two oils—olive oil and rapeseed oil—greatly resembled each

other. No complaint had ever been made against Mr. Baynes before.

Defendant was fined 20s. and costs.

Pennyroyal Tea.

An adjourned inquest was held at Battersea, on Tuesday, regarding the death of Annio Blake, a bottler at Barrett's, who had died in St. Thomas's Hospital a month ago, after taking pennyroyal tea. The evidence of the senior obstetric house-physician showed that abortion had been procured. Anne Amelia Bennett, wife of a retired chemist-traveller, stated that she carried on the business of a herbalist at Lambeth, having been there four years. She purchased her stock herself. She had turned away gold rather than do anything unjust. She was very particular. Medical evidence as to the nature of the infusion was then given, and the Coroner, in summing up, characterised the case as a suspicious one, but the jury found that the death was accelerated by the administration of the herbal infusion, which, in their opinion, was not given with criminal intent. The Coroner said the case should act as a warning to Mrs. Bennett and other herbalists.

Morphia-poisoning.

The Hammersmith Coroner has held an inquiry regarding the death of Thomas Watson, aged 68 years, formerly a factory-manager, Shepherd's Bush, who died from an overdose of morphia. On Sunday he was in his usual health, and later in the day said to his son, "I have taken a draught to induce sleep, and am afraid I have taken the wrong stuff." The drug was given to the deceased by a dentist, a personal friend, who was called. He said he cautioned the deceased as to its dangerous nature, and advised him to see a doctor. He gave him about $2\frac{1}{2}$ grains, and the deceased said he was used to taking it. The jury returned a verdict of accidental death.

The death is reported, from Manchester, of Mr. Robert Edie (29), surgeon to the Royal Eye Hospital. He was found in an unconscious state in the dispensary. Medical aid was at once called, and he was treated for opium-poisoning, from which he appeared to be suffering, but death could not be averted. Half an ounce of morphia was missing from a dispensary bottle. An inquest was held on Wednesday, when the jury agreed that death was due to opium, but for what purpose administered there was no evidence to show.

A Chemist's Assistant Takes Prussic Acid.

Mr. Henry Moss, assistant to Mr. J. Taylor, chemist and druggist, of Lucius Street, Torquay, took a fatal dose of poison on Tuesday morning. Upon the previous night Mr. Moss was apparently in good health and spirits, and retired to bed at the usual time. Rising at an early hour the next morning, he proceeded with his customary duties. Mr. Taylor being temporarily without a servant, Mr. Moss, who was regarded as one of the family, assisted the children in lighting the kitchen fire, and afterwards joined them in a little frolic. He seemed to be in the best of humour. At about a quarter to 8, one of the children went upstairs to tidy his bedroom, and found him lying upon the bed with a strange look upon his face. She called her father, who discovered that his assistant had poisoned himself with prussic acid, and that life was already extinct. The tumbler which he used was placed upon a table. Dr. Richardson was called in. It is thought deceased was suffering from a temporary aberration of the mind, which may be accounted for by the fact that for some time past he had been devoting himself to close study in view of an examination in chemistry. The deceased, who was 22 years of age, came from Whitehaven, Cumberland.

Alleged Theft from a Manufacturing Chemist.

At the Southend Police Court on April 13, Edward Berry (25) was charged with stealing 7l. 10s. from the Westward Ho Boarding-house, Southend, the property of Mr. Geo. Whiteley, manufacturing chemist, of 306 Burdett Road, Limehouse. The prosecutor and the prisoner were both staying at the same boarding-house, and Mr. Whiteley said that during the previous night he and his wife heard a noise in the room, but thought it was caused by mice. Afterwards, however, a night-light was blown out by someone, and

witness jumped out of bed and struck a match, when he saw the prisoner near the bed. He seized him, but he got away and slammed the door after him as he went out of the room. He followed and heard another door slam. He raised an alarm and the proprietor of the house and others came. They went to the prisoner's room and found him in bed with some of his day clothes on. A police sergeant came and made him turn out his pockets, in which was found 7l. 10s. in gold, 11s. 3d. in silver and copper, and an old coin. He told the prisoner the charge, and he replied, "Yes, very well." He found a bottle of chloroform and some wadding in the pocket of the prisoner's jacket on the bed. The prisoner was remanded.

A Chemist's Sad Death.

The death of Mr. Benjamin Davis, chemist, Leamington, which we reported last week, was occasioned in a singular manner. Some time ago a member of deceased's household was sent to replenish the pepper-box, and took from a shelf in the shop a bottle containing oxide of tin. From that vessel the pepper-box was replenished, and the results were somewhat disastrous. Several members of the family fell ill, and medical aid was called in. Since then the deceased had been confined to his bed. He gradually grew worse, and eventually died from the effects of lead-poisoning. These facts were laid before the Coroner for the district, but that gentleman did not deem it necessary to hold an inquest. Mr. Davis took a warm interest in local public affairs, and was a zealous worker in the cause of philanthropy in the borough.

Irish News.

Pharmaceutical Society of Ireland.

Pharmaceutical Assistants' Examination.—Messrs. C. A. S. Gillespie and J. McGrotty passed.

Registered Druggists' Examination.—Messrs. I. H. Henry and M. J. Monaghan passed. Two were rejected.

Prisons Contract.

The contract for supply of medicines and surgical requisites to the Prisons Board of Ireland, has been divided between Messrs. Boileau & Boyd, Dublin, and Messrs. Harrington (Limited), Cork.

Scotch News.

Treatment of Typhoid.

The continued prevalence of typhoid fever in Dundee has called popular attention to the method of treatment proposed by Dr. A. M. Anderson, the medical officer of health and superintendent of the local fever hospital. Dr. Anderson's treatment has been used continuously in the fever hospital for two years, and the results, both in cutting short the period of the attack and in decreased mortality, are said to be very gratifying. The treatment is antiseptic, and consists in the administration of salol and bismuth in the following form:—

Salol	gr. 160
Tr. chlorof. et morph. .. .	℥i℥
Lac. bismuthi (Synes') .. .	℥ii.
Aque ad	℥viij.

Doses: For adults, $\bar{\text{iv}}$. every two hours; between 6 and 14 years, $\bar{\text{ij}}$. every two hours; under 6 years, $\bar{\text{ij}}$. every two hours.

The effect of the administration of this medicine has been the reduction of the temperature to normal in from ten to fifteen days after the admission of the patients, and the mortality has been only one-half that of the usual death-rate of typhoid.

The Back Door.

At the Hawick Licensing Court last week an application was made for a renewal of the wine-licence held by Mr. W. R. Ross, chemist. Mr. Haddon pointed out that re-

peatedly at a late hour and during the night Mr. Ross had to make up prescriptions, and it would be very hard and awkward if he were obliged to close up the door leading to his dwelling-house, and have to come through a close into the front street and open up the whole shop to make up a prescription. The case was reserved for decision until Tuesday, when the Magistrates granted the application, but Mr. Ross has to close his back door.

Edinburgh Athletic Club.

The third annual general meeting of this club was held on Wednesday at 36 York Place. The reports showed that there were now 92 members, and in finances there was a balance on the right side, notwithstanding an expenditure of over 100%. The following were elected officers for the ensuing year:—Hon President, G. D. Mackay Esq.; President, W. D. Jameson; Vice-President, W. B. Cowie; Hon. Secretary, J. P. Gibb, 8 Buccleuch Place, Edinburgh; Hon. Assistant Secretary, J. Hogg; Treasurer, A. S. Birnie; Committee, J. McBain, J. Brown, D. T. Murray, W. A. Purdie, A. Nicolson, and G. F. Anderson.

French Pharmaceutical News.

(From our Paris Correspondent.)

THE PARIS OCTROI AND MEDICAMENTS.—M. Buchet, Director of the Pharmacie Centrale de France, has published a note concerning the dues collected by the Paris Octroi on certain exclusively medicinal products. The subject has been frequently discussed, but M. Buchet's position gives him particular opportunities for judging the question. He says that medicaments cannot come within the category of articles of consumption, properly so called, which are subject to the octroi dues. The officials, however, are far from being agreed as to which shall pay. Certain articles that pass in free at one city gate, pay at another, and *vice versa*. M. Buchet's object is to draw the attention of the administration to this abnormal state of things, and to endeavour to obtain uniformity amongst the officials as regards the application of the tariff to medicaments. He considers that the matter may be settled with comparative ease by Parisian pharmacists delegating some of their members to arrange with the Octroi Administration which articles ought to pay, and which ought to be admitted free.

ELECTION AT THE ACADEMY OF SCIENCES.—There was a very full attendance at the meeting of this Academy on Monday, April 16. The gentlemen present were to a great extent chemists, and for the most part friends of candidates of the chair rendered vacant by the death of M. Frémy. The election of a new member for the section of chemistry formed part of the afternoon's programme. The candidates were MM. Grimaux, professor at the Ecole Polytechnique, Ditte, professor at the Sorbonne; Jungfleisch, professor at the Ecole de Pharmacie; and six other gentlemen. The first named was elected by 45 votes out of 56, and the choice seems to be a popular one, M. Grimaux being known as a scientific man of high attainments, a good orator, and an habitué of scientific meetings. M. Grimaux was appointed professor of general chemistry at the National College of Agriculture in 1876; since 1881 he has been professor of chemistry at the Ecole Polytechnique. He was a pupil of Wurtz. Among M. Grimaux's original work which has won for him a leading place in the International realm of science may be mentioned his researches on the synthesis of citric acid, as well as of quinine. His discoveries in connection with morphia and codeine have also attracted much attention.

AN AMERICAN GIRL IN PARIS.—The Paris edition of the *New York Herald* contains a letter signed by an American girl alleging very discourteous treatment on the part of the proprietor of a "so-called Franco-American pharmacy" in this city. She says she took a prescription to the pharmacy and asked the price for preparing it. "Upon being told the cost I remarked that I would come back in a few days, as I had no immediate need of it. Whereupon the proprietor of the establishment, a large fine-looking man, who heretofore had been most courteous, became, to my

astonishment, beside himself with rage, and in a most violent and threatening manner (I almost thought he was going to strike me), said, 'I have had enough of you English and Americans. I know what you are in your own country, but you don't act that way with me. You won't get your prescription back nor leave this place without paying me a franc for my time and trouble.' And thereupon he put the prescription into his pocket, absolutely refusing to give it to me until I paid him.' The American girl intimates that she paid the charge to avoid further insults. The "large, fine-looking man" has not yet given his version of the incident, but it is likely that he could tell a very different story. It is inconceivable that a chemist should act in the manner described, and the irritation occasioned by foreign customers is not an unknown experience to Parisian trades-

Foreign and Colonial News.

APOLLINARIS IN THE U.S.—The Apollinaris Company have obtained an injunction in the Circuit Court of the Northern District of Illinois against Charles T. Davis and other defendants who have been imitating their labels.

THE IMPERIAL PHARMACOPŒIA.—The *Montreal Pharmaceutical Journal* offers \$10 and \$5 for the two best essays in French and English on the following subject:—"What modifications or additions should be made in the next edition of the B.P. to render it more suitable to the requirements of Canadian pharmacy?"

INDIAN MEDICAL CONGRESS.—It is proposed to hold a congress of physicians and surgeons at Calcutta in January next. The proceedings will be divided into five branches—viz., (1) medicine including pathology; (2) surgery; (3) obstetrics and diseases of women and children; (4) public health; (5) medico-legal medicine and allied subjects.

COCA-GROWING IN NEW YORK.—A fine specimen of the true Truxillo coca is reported to be in full bloom in the green-houses of Pitcher & Manda, at Short Hills, N.J., near New York City. The flower is attracting the attention of the medical botanists, and Dr. H. H. Rusby, of the New York College of Pharmacy, is quoted as saying that though not yet ready to concede it to be a distinct species, he is rather more inclined to that theory after observing this plant in bloom.

TRADE IN SAN FRANCISCO is in a very bad way just now, and druggists are feeling the pinch acutely. "Cutting" has much to do with the present state of matters, but Mr. W. M. Searby, Ph.C., states that in no city in the world does the custom of paying percentages to physicians prevail to the same extent as in San Francisco. The origin of this practice dates back thirty years. The commission was 20 per cent. at first, but it has risen to 50, 66, and even 75 per cent.

"FIRST AID" IN SNAKE-POISONING.—There was a man bitten by a tiger snake near Melbourne last month when he was trapping rabbits, and his mate showed prompt acquaintance with Mueller's method of treatment as detailed in Messrs. Burroughs, Wellecome & Co.'s leaflet on the subject. He tied a ligature round the wrist, sucked the wound, and took his bitten friend to the police barracks, where a fifteenth of a grain strychnine tabloid was injected. "Though the case was unquestionably a bad one," says a Melbourne paper, "and the snake was particularly venomous, the sufferer quickly recovered."

GIFT OF A VALUABLE HERBARIUM TO A PHARMACEUTICAL COLLEGE.—The herbarium of the late Isaac C. Martindale, of Philadelphia, comprising over 200,000 different plants and ferns gathered from every country in the world, and valued at \$10,000, has been presented to the Philadelphia College of Pharmacy. The herbarium was bought from the heirs of the late proprietor by Mr. Howard B. French and Messrs. Smith, Kline, and French jointly, and given to the College by these gentlemen. The collection will be kept separate from those the College already possesses, and each case will be labelled, "Martindale Collection, presented by Howard B. French, and Smith, Kline, and French."

AUSTRALASIAN NOTES.

THE following notes are based upon information contained in the March number of the *C. & D.* of Australasia:—

PRESENTATION TO A WHOLESALE DRUGGIST.—On Saturday afternoon (February 3) at Messrs. Elliott Brothers' warehouse, in Sydney, an illuminated address was presented to Mr. George Elliott, previous to his departure for England.

SHARLAND & CO.'S DIVIDEND.—Sharland & Co. (Limited), of Auckland, have declared an 8-per-cent. dividend for the past year. After making allowances for bad debts and depreciation of plant, and writing off 1,000*l.* from patent and proprietary rights, a sum of 2,489*l.* was left for disposal. The dividend mentioned absorbs 2,389*l.* of this, and the remaining 100*l.* has been carried forward.

SUIT AGAINST THE PRESIDENT OF THE N.S.W. PHARMACEUTICAL SOCIETY.—On February 20, in the New South Wales District Court, Mrs. Jane E. Pearce sued Mr. H. S. Brothwood, the President of the New South Wales Pharmaceutical Society, for carelessly neglecting to put the proper proportions of bismuth in a prescription he dispensed for her. She claimed 200*l.* damages, but although the jury found in her favour, the Judge only awarded her 1*s.* 9*d.*

AN ARBITRATION COURT IN MELBOURNE.—An Arbitration Court, on the model of that established about a year ago in the City of London, has been opened in Melbourne, and the Hon. F. S. Grimwade, M.L.C., has been appointed to act as an umpire in questions connected with the drug and chemical-manufacturing businesses. The "Melbourne Voluntary Arbitration Tribunal," to give it its full name, is promoted by the local Chamber of Commerce. Three experts, or in some cases only one, will hear and decide any commercial differences submitted to the tribunal, and any legal help required will be given by an independent lawyer. The list of qualified arbitrators numbers over 150 names connected with the various branches of commerce and finance, but does not, so far, include the name of any pharmaceutical chemist other than Mr. Grimwade.

FOREIGN BOTTLES IN SOUTH AUSTRALIA.—The South Australian Custom-house officers are disposed to take a somewhat stringent view of the provisions of the Merchandise Marks Act. An American firm of the name of Whitall, Tatum & Co. are in the habit of exporting large quantities of bottles to the colony. These are branded with the device "W. T. & Co., U.S.A."; but the Customs officers say that that is not a sufficient indication of the place of origin, and that the bottles should be marked on the front or sides with the name of the country in which they are made. The firm object that the public would probably construe such an addition as meaning that the contents of the bottles as well as the glass come from the United States; but the Customs stand firm, and Messrs. Whitall, Tatum & Co. have therefore decided to brand their bottles with the legend "Glass made in America," in addition to their initials.

A MELBOURNE WHOLESALE DRUGGIST'S WAREHOUSE ON FIRE.—On February 21, about 2 P.M., a large portion of the busiest part of Melbourne was enveloped in sulphurous smoke, greatly to the perturbation of wayfarers. It proved to be caused by a fire at the warehouse of Rooke, Tomsitt & Co., Flinders Street. The building is divided into three sections, parallel with Flinders Street, and the fire had broken out in the top storey of the third one. A very large force of the Fire Brigade was quickly concentrated on the spot. To give vent to the smoke, and allow the firemen to get near enough to the fire for effective work, holes were cut in the roof, while for the protection of the goods below a large tarpaulin was fixed under the burning flat, with a hose-pipe attached as a drain. A large volume of water was then poured on the fire, and after about an hour-and-a-half's work was extinguished. The fire is supposed to have originated from a match carelessly thrown down in some outhouses on the roof. The building was insured for 5,000*l.*, and the stock for 22,500*l.*, divided among some twenty-one offices.

PHARMACISTS PREPARING FOR ATTACK.—On February 16 a meeting, attended by about fifty pharmacists, was held at

the College of Pharmacy, Melbourne, to consider the position of the pharmaceutical body in view of the recently-established interpretation of the Victorian Pharmacy Law. The law makes it illegal "for any person not being a registered pharmaceutical chemist to carry on or attempt to carry on business as a chemist and druggist or homoeopathic chemist or either." This definition has recently been interpreted by the Courts as meaning that "for the purposes of the Act, chemists and druggists within the meaning of this part of this Act shall consist of all persons who, at any time before the passing of the Pharmacy Act of 1876, have carried on the business of a chemist and druggist in the keeping of open shop for the compounding of the prescriptions of duly qualified medical practitioners." At the meeting, Dr. Mullen, to whose initiative the gathering was partly due, pointed out that the English Act says, "You may not keep open shop for the sale of poisons"; the Victorian, "You may not attempt to carry on the business of a chemist and druggist." The question would be asked, "What is a chemist and druggist?" His reply would be, "One who sells drugs and medicines." Carbonate of soda may be a drug or may not, in accordance with the use to which it is put. Castor oil is in a similar position. The intention of the seller must be taken into account. If a prosecution were undertaken it would be advisable to take a case in which a drug which is not a poison had been supplied in order to settle definitely if it were legal to sell a drug, and in which the defendant would be prepared to carry the case on from court to court till it reached the highest. An executive committee, consisting of one chemist in each district represented, was elected, and steps are being taken to form a union embracing all the Victorian chemists, for the purpose of putting the new interpretation of the law in force throughout the colony.

THE FIRST RESULT OF THE MEETING.—The pharmacists' meeting appears speedily to have born fruit, for within a week of it, on February 22, Elizabeth Gould, an "American herbalist," of Elizabeth Street, Melbourne, drug-seller, was proceeded against on the information of H. W. Shillinglaw, an official of the local Pharmaceutical Society, "for that she, not being a registered pharmaceutical chemist, did, on February 5, carry on the business of a druggist contrary to the Act." Mrs. Gould, it appears, had sold a box of pills to an emissary of Mr. Shillinglaw's, who asked for them under pretence that they were wanted for "a lady friend of his (the emissary's), who was in trouble." Half-a-guinea was the price demanded by Mrs. Gould for the pills that were to help the lady friend through that euphemistically-named "trouble." But the lady and her woes were a myth, and the pills, instead of finding their way into the internal economy of a betrayed female, wandered into the office of the prosecutor, who succeeded in causing Mrs. Gould to be fined 5*l.*, with 8*s.* costs. Mrs. Gould would not say what the pills were made of; all she admitted was that they contained aloes. The woman is one of the most notorious quack-advertisers of Victoria. Four days later a Mrs. E. Graham was fined 5*l.* and 2*s.* costs for a somewhat similar offence under the same Act.

NEW SOUTH WALES' EXPORTS OF DRUGS AND CHEMICALS.—The New South Wales Statistical Register for 1892 and previous years reveals the interesting fact that, while the re-export of drugs, chemicals, and apothecaries were made or produced outside Australia has been nearly stationary, the export of similar articles of domestic produce or manufacture has increased in a very remarkable manner. We give below, side by side, the figures of the two classes:—

	1888	1889	1890	1891	1892
Domestic goods	£1,923	£4,411	£3,235	£6,995	£12,938
Foreign goods	33,402	34,338	31,685	33,800	27,775

It would be interesting to know the cause of this marked change. The figures for 1893 show a drop of 123,000*l.* in the imports of drugs.

IN CHLOROFORM-POISONING Dr. Washburn has found strychnine useful. To a man who had swallowed 2 oz. of the anæsthetic $\frac{1}{10}$ gr. of strychnine was given hypodermically, and later $\frac{1}{100}$ gr. This, with artificial respiration, sufficed for recovery.

The Winter Session.

SOCIETY OF CHEMICAL INDUSTRY.

LONDON SECTION.

A CROWDED audience was attracted to the lecture-theatre of the Chemical Society, Burlington House, on Monday last, by gold, in the shape of Mr. de Mosenthal's paper, "The Treatment of Gold-ore at the Transvaal Goldfields." First was read, however, a note by Mr. F. PLATTEN on

A MODIFICATION OF THE FERRIC-CHLORIDE DISTILLATION-PROCESS FOR THE ESTIMATION OF ARSENIC IN COPPER.

Dr. John Clark, in 1887, published a process for the estimation of arsenic in pyrites, depending upon the distillation of arsenic from a mixture of arsenical ore with copper and ferric chloride. The arsenic is then converted into sulphide, and weighed or titrated with iodine. Mr. Platten observed that the hot water used to wash the sulphide deposited on cooling, and although it is commonly believed that sulphide of arsenic is insoluble in water, this belief is erroneous. Mr. Platten therefore proposed to obviate the difficulties of washing, drying, and weighing precipitates of small quantities of arsenic sulphides by boiling the sulphide for an hour or two with a large volume of water, and then titrating the solution with iodine.

In the course of the discussion, Mr. SUTHERLAND asked what objection there was to the use of ammonia as a solvent, with subsequent evaporation and weighing of the residue, to which Mr. PLATTEN responded that the precipitate was frequently contaminated with sulphur, which was liable to vitiate the results.

TRANSVAAL GOLD.

Mr. DE MOSENTHAL then had a clear field, and for an hour and a half he held his audience together, whilst he described, in a somewhat popular style, his personal impressions and experiences obtained during a recent visit to the Transvaal goldfields. His paper was very fully illustrated with specimens of ores, "concentrates," "tailings," and amalgams, though there were no 1,000-oz. ingots of the finished product handed round for inspection. Diagrams and lantern-plate views of the mines and of the machinery employed in the varied processes to which the ores are submitted added greatly to the interest of the paper. The author stated that large quantities of

SULPHURIC ACID

are used in the process of extraction, and this, until recently, was imported from England. But for some time past the acid has been manufactured at works about fifteen miles from Johannesburg. Only 500 tons of the acid are required yearly, and the local factory supplies chamber-acid at 20% per ton. The factory has no concentrating-apparatus. Imported acid of full strength costs 25% per ton, laid down at Johannesburg, but there is, in addition, a heavy duty, which has been imposed to protect the Transvaal product.

The discussion, which was appreciative, embraced observations from Messrs. MACARTHUR, LOUIS, REDWOOD, WATSON SMITH, SUTHERLAND, and the CHAIRMAN (Mr. Thorp).

CHEMISTS' ASSISTANTS' ASSOCIATION.

At a meeting held on Thursday, April 12—Mr. E. F. Harrison, President, in the chair—a paper by Mr. FRANCIS H. CARR, entitled

RECENT ADVANCE IN CHEMICAL THEORY,

was read by the Literary Secretary. The author said that about 100 B.C. the Greek philosophers were puzzling themselves about the ultimate constituents of which the earth was composed. In the fourth century the alchemists of the iatro, or medical, and phlogiston period attempted a rough classification of different kinds of matter, but modern chemistry was largely indebted to hypotheses such as that of Dalton's. The theoretical deductions of Mendeleeff were next dealt with. Mendeleeff classified the elements according to their atomic weights, and found that malleability, ductility, fusibility, electrical properties, and

chemical properties, especially that of forming oxides and chlorides, varied according to the arrangement of the elements into groups and series by their atomic weights. The next theory expounded was the linkage of the atoms in a molecule. The insufficiency of the plane constitution of molecules was dealt with, and the theory of Le Bel and Van t'Hoff was explained, and its service in elucidating the constitution of carbon compounds was pointed out. The relative value of boiling-points, melting-points, and density were shown to have a direct relation to the constitution of compounds; and the heat of combustion, the author said, was affected by the single, double, or triple linkage of the carbon atoms. In the combustion of ethane it was greater than in ethylene, and in ethylene greater than in acetylene. This had led to a new theory for the arrangement of the carbons in benzene, and tended to show that the six carbons were attached by nine single linkings, and not, as Kekulé supposed, by three single and three double linkages.

The remainder of the paper dealt with the colour of salts, and the effects of kinetic energy, dissociation, photo-chemical action, and electricity upon matter, and the theories which they had given rise to; but these theories were evidently too abstruse, for the members had decreased in number considerably before the discussion had finished, and those remaining, who did discuss the paper, were agreed that it was too much to swallow in one evening.

BRIGHTON JUNIOR ASSOCIATION OF PHARMACY.

At the annual general meeting of this Association, held on April 11, the following officials were elected for the ensuing year:—President, Mr. C. G. Yates (re-elected); Vice-Presidents, Messrs. Greening and Price; treasurer, Mr. Bridgwood; hon. secretary, Dr. F. Crowhurst; assistant secretary, Mr. Gibson, jun.; committee, Messrs. Colman, Cupit, Kent, Williams, C. Crowhurst, and Beckwith.

In the course of the meeting the result of the apprentices' examination in elementary inorganic chemistry (theoretical) was made known, as follows:—First prize, 1*l.* 1*s.* (presented by Mr. W. H. Gibson), awarded to Mr. Chas. Kent; second prize, 10*s.* 6*d.* (presented by Mr. W. W. Savage), to Mr. Smyth.

A letter was read from the Secretary of the Pharmaceutical Society acknowledging the receipt of 14*l.* for the Benevolent Fund, which sum had been collected in the B.J.A.P.'s box during the session.

THREE TOWNS AND DISTRICT CHEMISTS' ASSOCIATION.

A MEETING of the Assistants' Section was held in the Plymouth Foresters' Hall on Wednesday, April 12. Mr. W. H. AUSTIN read a paper on the "Destructive Distillation of Coal," in which he dealt with coal as it is found, and traced it through its various uses, illustrating the manufacture of gas by a series of diagrams, and finishing with an explanation of the manufacture of aniline and saccharin. A brief discussion followed.

Mr. H. O. Westcott was elected honorary secretary in place of Mr. Ernest Hodge. Mr. E. H. W. Green resigned the chairmanship, and it was resolved to appoint a chairman nightly for the future.

It was decided to allow all chemists who are members of the Association to attend meetings of the Junior Section.

The Association is offering a series of prizes to its unqualified members: (a) three in chemistry, for powders to be analysed, (b) two in botany, for mounted specimens, and (c) one for an essay on "The Present State of Pharmacy from a Student's Point of View" or "How Best Prepare for the Minor."

CARBOLIC ACID AND RATS.—The *Alumni Report* states that 3,000 barrels of crude carbolie acid were recently brought to Philadelphia by a barque from Glasgow for a chemical-factory at Tacony. The bringing of such a cargo is a new experience to the Quaker city. The statement is made in a local paper that no living thing, like rats, mice, vermin, &c., can live on a vessel with such a cargo; they left the vessel while she was loading on the Clyde, or died on the passage.

Trade Notes.

WE call attention to an important announcement made this week by Mr. J. T. Davenport, sole manufacturer of Dr. Collis Browne's chlorodyne. It is to the effect that the chlorodyne contains nothing included in Part I. of the poisons schedule.

MESSRS. COLEMAN & CO. (LIMITED), Norwich, offer in their advertisement this week to pay for a "sweets" licence for chemists who will stock a certain quantity of the Wincarnis which they make with British wine. They also make a non-alcoholic Wincarnis and one with foreign wine.

MESSRS. OPPENHEIMER, SON & CO. (LIMITED) announce to chemists that they are now directing the attention of the medical profession very particularly to their palatinoids and other preparations of cascara sagrada. They therefore ask chemists to be prepared to meet the demand for these preparations which they expect will result.

THE LATEST TABLOID contains a tenth of a grain of potassium bichromate, suitably diluted with a harmless solid. Professor T. R. Fraser reported to the Medical Congress at Rome most successful results in the treatment of gastralgia with the bichromate, and although the report of the paper did not get into the medical papers until last Saturday, Messrs. Burroughs, Wellcome & Co. had the tabloids ready before that. We understand that Professor Fraser approves of this form of administering the medicament.

CASCARA JELLY.—Messrs. C. R. Harker, Stagg & Morgan, of Laurence Pountney Lane, E.C., have introduced a very elegant preparation of cascara sagrada, which will be appreciated by physicians and pharmacists. It takes the form of a jelly, with nice fruity flavour, in which it is impossible to detect any medicinal taste. The jelly will be useful, especially for children, to whom laxatives are always abhorrent. It is put up in glass jars to retail at popular prices, but the larger jars may be used for dispensing.

MESSRS. LORIMER & CO., Britannia Row, Islington, have issued a handsome prices current, consisting of 112 quarto pages, freely illustrated, describing all their specialities, and listing a full line of drugs, galenicals, and sundries. Messrs. Lorimer & Co. have long had a special reputation for the counter-specialities which they put up for chemists' sale; and here they illustrate all the principal styles in which they send out these luxuries. The catalogue contains, besides, a number of full-page drawings representing bits of their extensive factory.

JEYES' SANITARY COMPOUNDS COMPANY (LIMITED), 43 Cannon Street, E.C., send us a sample of symphorol for which they are agents on behalf of Messrs. Meister, Lucius & Brüning, the manufacturers. As explained in our issue of January 6, there are three symphorols—viz., the sodium, lithium, and strontium salts of caffeine-sulphonate. The introduction of a sulpho group into caffeine is claimed to annul the action upon the vaso-motor centre without impairing the alkaloid's action upon the kidneys. It is thus considered to be a valuable diuretic in those diseases in which the heart is affected. The dose is 15 grains.

A "FROG IN THE THROAT" shop-window display has attracted considerable attention at Halifax during the past week. This is a method of advertising adopted by Messrs. Hance Brothers & White, of Philadelphia (for whom Messrs. Barclay & Sons are agents in this country), to make known their "frog in the throat" lozenges. The shop which has been lent at Halifax for this purpose is that of Mr. H. W. Seeley, chemist, 14 Southgate, and the chief feature of the display is a representation of a football-match between Halifax and Bradford, the teams being composed of frogs. The frog-show comprised representations of many other queer and comic frog scenes and groups, including the representation of a lake with grass, reeds, &c.

WE had occasion in our last Summer Issue to call attention to some of the manufactures of Messrs. Frederick Stearns & Co., of Detroit, which were exhibited at the World's Fair; and the opening of a branch of the house in London gives us the opportunity of again calling attention to some of

these, which are being introduced to the English trade. One of the most notable is the wine of cod-liver oil and peptonate of iron, which the makers claim (and support with good clinical data) to be equal to cod-liver oil in restoring the strength of the weak. Of course, the wine does not contain the oil *per se*, but the active and alkaloidal constituents, which have the power of restoring assimilation, and thereby increasing weight. A fair argument is advanced in support of this statement—viz., that patients taking cod-liver oil increase in weight far beyond the proportion of oil which is taken; therefore, it cannot be the assimilation of the oil, but the stimulant or restorative properties of its active constituents, which induces increase of body-weight. The wine is equal to a fourth of its volume of cod-liver oil, and it also contains 4 grains of peptonate of iron in each fluid ounce. It is pleasant to take, and is put up in attractive style. Stearns's "Cascara Aromatic" is a non-bitter extract of cascara sagrada, aromatic and sweet to taste. We understand that it is prepared exclusively from bark which has matured for two years, and in the course of manufacture the bitter and griping principles are removed. The makers send out some useful formulæ with it, such as the following, for acting upon the liver as well as the intestinal tract:—

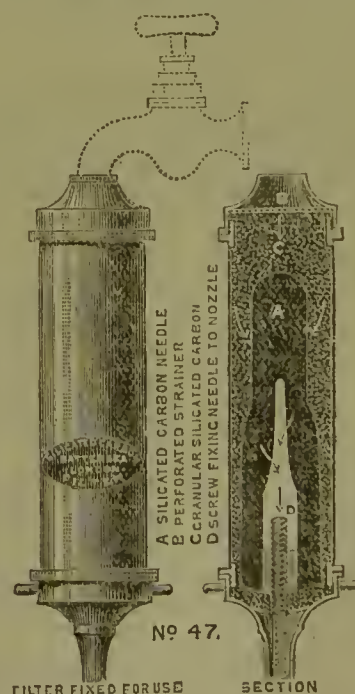
Stearns's Cascara Aromatic	3j.
Fluid extract of senna	3ss.
" " euonymus	3ij.
" " wild cherry	3ss.
Syrup to	3iv.

Mix.

Dose: One to two teaspoonfuls.

Dike's scale pepsin, which we casually mentioned last July, is an almost colourless and non-hygroscopic product in well-formed scales. It has certain advantages, such as forming a clear solution in distilled water; it may be dispensed in powder form without caking, or used for the preparation of liquid pepsin compounds. The firm's London office is at 25 Lime Street, E.C. (Messrs. Christy & Co.'s).

THE SILICATED CARBON FILTER COMPANY, of Battersea, have introduced a new pressure-filter—the "Needle"—which we illustrate herewith. It will be seen that the filter is intended for attachment to the ordinary water-tap, and the construction and arrangement of the filtering media are such as to ensure a sterilised filtrate. After passing through the strainer, the water meets a section of finely granulated



silicated carbon, which is effective for the withdrawal from the liquid of all suspended inorganic matter. Next the water passes through the candle of compacted silicated carbon, which, while completing filtration, also sterilises the water. The filter has the further advantage of being easy to clean, as the combined media can be quickly taken out of the enclosing cylinder.

TRADE-MARKS APPLIED FOR.

ANY person who has good grounds of objection to the registration of any of the following marks should at once communicate with Sir Reader Lack, Comptroller-General, at the Patent Office, 25 Southampton Buildings Chancery Lane, London, W.C.

(From the "Trade Marks Journal," March 28, 1894.)

Device of open book, for medicated plasters (surgical and medical). By A. de St. Dalmas & Co., 40 Belgrave Gate, Leicester. 176,931.

"ESPOIR PILLS"; for pills, ointment and medicated drops. By C. E. Hope, 61 Bedford Road, Ilford, Essex. The essential particular is the word "Espoir." 178,179.

"ECLIPSE" and device showing an eclipse of moon; for seltzogenes. By Bratby & Hinchliffe (Limited), 11 Sanford Street, Ancoats, Manchester. The essential particular is the device. 178,262.

(From the "Trade Marks Journal," April 4, 1894.)

"VANOL"; for chemical substances used for veterinary and sanitary purposes. By L. T. Ashwell, Natal House, Hadlow. 178,287.

Device of various animals' heads, and bottles, signature, and wording on label; for a liniment for horses, cattle, sheep, and dogs. By Richardson Brothers & Co., 67 Lord Street, Liverpool. The essential particular is the combination of devices. 178,031.

"UKA"; for medicines for human use. By D. H. Oxen, 40 Bridge Street, Newcastle, Staffs. 169,868.

"NERVETONINE," and device of chariot and horses with rider running down diseases; for medicine for human use. By Nervetone (Limited), 17 Gordon Street, Glasgow. The essential particular is the device. 169,888.

"WAUKPHAR CO." and pictorial label; for an antiseptic military foot-powder. By the Waukphar Company, 39 Victoria Street, Westminster, S.W. 178,292.

"NIBESTOS"; for filters. By E. M. Knight, 126 Charing Cross Road, London. 178,547.

(From the "Trade Marks Journal," April 11, 1894.)

"MAXUM"; for chemical preparations in the nature of sheep-dips, insect-killers, &c. By S. MacAdam, jun., Surgeons' Hall, Edinburgh. 171,481.

Device of letter H encircled by wasps; for a disinfectant. By B. B. Haresceugh, 21C Wellington Street, Leeds. The essential particulars are the devices. 177,981.

"PRE-CIPI-TEE SOAP," and device of boy before and after using soap; for a medicated soap. By F. Guttridge, 8 High Street, Horncastle. The essential particulars are the devices. 176,606.

"KURAPANE," and signature of applicant; for embrocations, lotions, &c. By W. H. Izod, trading as Izod & Co., 1 Weston Hill, Norwood, London. The essential particular is the signature. 178,148.

"LAPACTIC"; for chemical substances for use in medicine and pharmacy. By Oppenheimer, Son & Co. (Limited), 14 Worship Street, London. 178,524.

Device of Leith Hill Tower, and wording; for chemical substances used in medicine and pharmacy. By John Cross & Co., 21 High Street, Redhill. The essential particular is the device. 178,886.

"YAWLO"; for perfumery and toilet-articles, &c. By O. R. Sykes, 46 Cambridge Terrace, Hyde Park, London. 178,123.

"BERNSTEIN'S VEGETABLE TOOTH-ENAMEL," and wording, and device of burning mountain; for a dentifrice. By H. Bernstein, 24 Rodney Road, Walworth, S.E. The essential particular is the burning mountain device. 178,288.

"EMOL-KELEET" and "KELEET"; for perfumery and toilet-articles. By the Keltie Products (Limited), 123 George Street, Edinburgh. The essential particular is the word "Keleet." 178,457, 178,462.

"ELENGA"; for a hard water toilet-soap. By Helen J. W. Taylor, Westbourne Lodge, Scarborough. 178,509.

(From the "Trade Marks Journal," April 18, 1894.)

"HIMROD'S CURE," portrait, wording, and signature on label; for a medicine for cold, diphtheria, asthma, catarrh, &c. By the Himrod Manufacturing Company, 191 Fulton Street, New York. The essential particular is the device. 169,033.

"GEORGE ELVEN'S LIVER-PILLS," and device of portrait in circle; for liver-pills. By G. Eliz. S. Ingram, 62 Chantler Road, Victoria Docks, Essex. The essential particular is the device. 178,044.

"OXIEN"; for chemical substances used in medicine and pharmacy, especially medicinal plasters. By the Giant Oxie Company, 20 Willow Street, Augusta, Maine, U.S.A. 178,575.

Device of a squirrel eating nut; for toilet-soap. By D. C. Keeling & Co., Queen's Soap-works, 63 and 65 Blundell Street, Liverpool. 178,050.

New Companies.

LLWYNYPPIA AERATED-WATER COMPANY (LIMITED).—Capital 1,000*l.*, in 2*l.* shares. Objects: To carry on the business of aerated-water manufacturers of all kinds, refreshment-house keepers, &c. Registered office, Ivor Hall Terrace, Llwynypia, Glamorgan.

LEE BARBER'S LOWESTOFT OIL-MILLS (LIMITED).—Capital 40,000*l.*, in 10*l.* shares. Objects: To acquire the business carried on at Lowestoft, Norwich, under the style of John Lee Barber & Co., and to carry on the business of seed-crushers, oil-refiners, and oil-cake manufacturers in all its branches. The first directors of the company shall be H. E. Crawley, F. H. Oates, and R. W. Cox; remuneration to be determined in general meeting.

CEREBOS SALT COMPANY (LIMITED).—Capital 20,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturing, selling, and otherwise dealing with the preparation or compound nutritive table-salt, known as "Cerebos Salt," and to deal in chemical foods, food-substances, drugs, medicines, &c. The first directors are T. H. Walker, J. A. France (St. John Street, Newcastle-on-Tyne), and J. R. Stewart (33 Granger Street, Newcastle-on-Tyne); remuneration, 300*l.* divisible; qualification, 250*l.*

NORTH DEAN CHEMICAL COMPANY (LIMITED).—Capital 10,000*l.*, in 10*l.* shares. Objects: To carry on the business of manufacturers of chemical products, &c. The first subscribers (who take one share each) are:—J. C. Nicholson, Hunslet Chemical-works, Leeds, chemical manufacturer; E. A. Brotherton, Park Row, Leeds, chemical manufacturer; G. Brumfitt, Park Row, cashier; W. A. Lupton, Leeds, solicitor; W. Fawcett, Leeds, solicitor; T. Naylor, 18 Crab Lane, Armley, agent. The first directors are E. A. Brotherton, J. C. Nicholson, and J. Nicholson. Qualification, 500*l.*; remuneration to be determined in general meeting.

FANGIER - GENESTELLE NATURAL MINERAL - WATER COMPANY (LIMITED).—Capital 4,000*l.*, in 1*l.* shares. Objects: To acquire the business now carried on at Genestelle, Ardèche, France, and to transport, import, and export natural and other mineral-waters, &c. The first subscribers (who take one share each) are:—D. Fangier, 169 Piccadilly, W., gentleman; H. T. Smith, Kilburn, N.W., accountant; F. E. Thomasson, 27 Chancery Lane, architect; W. Wilson, 169 Piccadilly, W., agent; J. C. S. Marsh, 134 Tufnell Park Road, N., secretary; A. Hognan, 225 Tufnell Park Road, N., gentleman; L. D. Tottenham, Old Jewry, E.C., solicitor. The first directors shall be appointed by the subscribers. Qualification, one share; remuneration to be determined in general meeting.

Legal Reports.

THE PHARMACEUTICAL SOCIETY AND PATENT MEDICINES. PETITIONS TO REVOKE PATENTS.

IN the Chancery Division of the High Court of Justice, on Saturday, a petition by the Pharmaceutical Society of Great Britain, praying the Court to revoke Rendell's Patent, No. 13,922 of 1892, was heard by Mr. Justice Stirling.

Mr. Roger Wallace appeared for the Society, and Mr. Wright Taylor for the respondent.

Mr. Wallace said the Society for whom he appeared was incorporated by charter in 1843, and it not only regulated the affairs of chemists and druggists, but also, under the Act of 1852, and various other Acts, the Society had been entrusted with the care of the public in the matter of the sale of poisons. A case had been decided in which it was held that when patents were granted they did not come within the provisions of those Acts, and in consequence a large number of patents for medicines were taken out. They were worthless patents, many of them; but they were taken out mainly to evade the Act. The patent in the present case was for a preparation of 2 oz. of sal volatile, 2 oz. peppermint, 2 oz. spirit of camphor, and 2 oz. of laudanum, and the claim was for "a combination of ingredients for the treatment and cure of the various and similar complaints as herein set out and described." The Pharmaceutical Society had felt it their duty to revoke a number of these patents, and they had leave of the Attorney-General to present the petition which was now before his Lordship. Mr. Wright Taylor was present for the respondent, and, he (Mr. Wallace) believed, consented to the revocation of the patent.

Mr. Wright Taylor said that his client consented to the revocation of the patent, but not at all on the ground upon which it had been put to his Lordship—that it was a patent containing poison, and so non-patentable at all within the decision in Piper's case, to which his learned friend had referred. He consented to the revocation on the ground solely that he did not think he could support it as a good subject-matter. But there was the question of costs. He believed that the ordinary practice in these revocation cases was that the law officer do only issue his *fiat* after notice to the parties concerned. If that course had been taken in this case, his client would have appeared before the law officer and consented at once to the revocation of the patent. In this case the law officer had granted his *fiat* without notice to the respondent, and for that reason he submitted that the respondent should not be saddled with the costs.

Mr. Wallace contended, that according to the Act, the revocation of the patent might be obtained on petition to the Court; and the law officer having no authority to do so, all that the Pharmaceutical Society had to do was to get his consent, and need not serve the other side.

Mr. Wright Taylor said his point was that the law officer not having given the respondent an opportunity, as in the ordinary practice of appearing before him prior to the issue of his *fiat*, the respondent should not be charged with the costs.

His Lordship: But I do not see how the revocation could be obtained without presenting the petition.

Mr. Wright Taylor: My position is that we could have consented before the law officer, and have taken our patent off the register.

His Lordship: That is not revocation. I give the costs of the application before me—that is, the costs of this petition.

Mr. Wallace: We were obliged to do this by the section. We are not like those persons who could present a petition without the leave either of the Attorney-General in England, the Attorney-General in Ireland, or the Lord Advocate in Scotland.

His Lordship: Well, I give you the costs of the petition.

An order was accordingly made for the revocation of the patent and the costs of the petition.

KAY'S PATENT.

MR. WALLACE also appeared on a petition for the revocation of Kay's patent, No. 16,496 of 1892. He said that the

letters patent were granted to Thomas Kay, George Arthur Shaw, and Kay Brothers, chemists and druggists, Stockport. His friend Mr. Lawson appeared for two of the respondents, and he (Mr. Wallace) appeared for the Pharmaceutical Society; and Mr. Lawson would take the preliminary objection that one of the respondents had not been served. But that respondent was in South Africa, and he (Mr. Wallace) did not know that it was necessary, in a case of this kind, that all the patentees should be served. If his Lordship looked at the letters patent, he would see that the specification was signed by Thomas Kay, George Arthur Shaw, and George Downes, the secretary for the firm; so that there were plenty of the patentees here, and the remaining one was expected back in England. He was willing, however, to let this petition stand over, and put it into the witness list, with liberty to apply.

Mr. Lawson said he was willing that it should go into the witness list, and that nothing further should be done until the Society had served Kay.

His Lordship asked if the other respondents were in communication with Mr. Kay.

Mr. Lawson said they were, but they had not heard definitely when he was coming back. There was a connection between Thomas Kay and Kay Brothers, but he (Mr. Lawson) was instructed only on behalf of Mr. Shaw and of Kay Brothers.

His Lordship said he was afraid there was no power at present to serve the petition out of the jurisdiction.

Mr. Wallace said that the new rules gave the Court power to serve out of the jurisdiction in applications under the Trade-marks Act.

His Lordship said there was no statutory provision for serving out of the jurisdiction in these cases; but he could do what had been done with reference to service of notice of action in regard to trade marks.

Mr. Wallace remarked that such notice could be given; but it might be useless expense if Mr. Kay was coming back to England.

Mr. Lawson: He is expected back in a month or two.

His Lordship: Well, I will simply put it into the witness list with liberty to apply, with this observation—that, unless Mr. Kay comes into this country and is formally served, or appears by Mr. Lawson, or unless he gets a notice that the petition will be brought on upon a particular day—as in proceedings in connection with a trade-mark petition—the petition cannot be heard.

HUNYADI JÁNOS WATER.—SAXLEHNER v. TREHARNE & SON (LIMITED) AND R. E. WILLIAMS.

THIS was a motion which came before Mr. Justice Chitty on Friday last, on behalf of Mrs. Emily Saxlehner, the proprietor of the Hunyadi János Water, for an injunction to restrain the defendants from selling, offering for sale, or exporting any aperient mineral water in bottles bearing either of two certain red labels used by them, having in the centre a device, consisting of a medallion, with the name, "Hunyady Mathias Corvinus," or bearing any other label so nearly resembling either of the labels used by the plaintiff for her Hunyadi János Water as to deceive purchasers or to enable the Hunyadi Mathias Corvinus Water to be passed off on purchasers as the plaintiff's Hunyadi János Water.

Mr. Sebastian, who appeared for the plaintiff, said: I am instructed by both the defendants in Saxlehner v. Treharne & Son and Saxlehner v. Williams. The defendants submit to the hearing of the motion being treated as the trial of the action and to perpetual injunctions against them on the terms agreed to by the solicitors, who have arranged the sum to be paid as costs. In order to save expense, both parties have instructed me to appear for them.

Mr. Justice Chitty: You may do that if you are willing to take the responsibility. It is a consent order?

Mr. Sebastian: Yes, my Lord.

Mr. Justice Chitty: Very well.

Order in the terms asked for.

THE SALE OF CHLORODYNE.

MR. BRUCE, the Leeds Stipendiary, gave his decision on Wednesday in the case in which Cuthbert George Catterall, chemist, Hyde Park Corner, was summoned under the

Pharmacy Act, charged with having sold a poison known as prussic acid, contained in a preparation known as Browne's "Chlorodyne," without making such entry of the same as was required by the Act. The case was heard on the previous Wednesday, when Mr. Dunn appeared for the prosecution, and Mr. Arthur Willey defended. The sale was admitted, as was also the non-entry, and the question left open was whether the article sold was or was not a poison within the meaning of the first part of the schedule. Mr. Bruce, in reviewing the evidence, said, an analytical chemist called by the prosecution had said that on analysis he found the compound to contain prussic acid, but the amount was very small—not more than .005 to one-hundred parts of the whole. He said if the whole bottle were taken it would prove fatal, but that was not owing to the prussic acid, for there were chloroform and opium contained in it, but these did not come within the first part of the schedule section. For the defendant, the manufacturer, Mr. Davenport, swore that prussic acid was not used in the preparation. Evidence was tendered to show that other bottles had been analysed, that these bottles came from the same bulk as that on which the prosecution rested their case, and that they did not contain prussic acid, but it was objected to by the prosecution and consequently not admitted. He, however, entertained a doubt as to whether there was prussic acid in the mixture, and he could not therefore decide to convict. The evidence might have been completed by having an analysis of more bottles, and the calling of more witnesses than one. He saw no reason to doubt the evidence of the manufacturer, and there was no suggestion that the prussic acid had been added to the mixture. If it had been, some points of law might have arisen which it was unnecessary to consider now. The case would be dismissed. On the application of Mr. Willey, the Stipendiary granted costs.

KEATING v. RUSSELL.

IN the Chancery Division of the High Court of Justice, on Thursday, April 19, the trial of this action came before Mr. Justice Romer. The plaintiff's claim was for an injunction to restrain the defendant from selling as "Keating's insect powder" powder which was not of the plaintiff's manufacture.

Mr. R. Neville, Q.C., and Mr. Fellowes appeared for the plaintiff; Mr. Oswald, Q.C., and Mr. J. Edwards, for the defendant.

Mr. Neville, in opening the case, said that the complaint made against the defendant was that he sold his own powder when asked for "Keating's" as and for "Keating's." The plaintiff naturally considered his preparation honestly superior to all others of a similar sort. The defendant on the contrary said that was not so. The plaintiff did not care much about that; he left the public to form their own judgment on the point. All the plaintiff said was, "By all means sell your powder if you can get people to buy it under its own name, but do not represent to the public you are dealing in mine." The defendant was Fredk. Thomas Russell, who traded as Thomas & Co., in High Street, Poplar. It came to the knowledge of the plaintiff, who was the representative of the late Mr. Keating, and who carries on the sale of the preparation invented by him, that the defendant was selling his powder as "Keating's." It was common knowledge that Keating's powder was only sold in tins, and was not sold by weight. The evidence for the plaintiff was that a Mr. Thomas Milton went to the shop of the defendant and asked for a pennyworth or twopennyworth of Keating's insect-powder, not knowing it was only sold in tins. He had some powder weighed out to him, which he carried away in the belief that it was "Keating's." On his way home he submitted his purchase to the inspection of some comrades, and in consequence of what he was told he repaired to Messrs. Keating's. Instructions were given to two employes of the plaintiff to go to the shop and ask for "Keating's" powder. This was done on two occasions, on each of which the article supplied was not genuine "Keating's" powder. The plaintiff accordingly asked for an injunction.

The defence was that the powder sold to Milton and the others was never sold as "Keating's."

Evidence having been called for both sides,

Mr. Justice Romer gave judgment for the plaintiff, and granted the injunction asked for.

Personalities.

MR. D. U. STILL, chemist and druggist, has been made overseer for the town of Woolwich.

MR. J. F. DAVY, chemist and druggist, Witney, has been appointed overseer for the ensuing year.

MR. W. W. LOCKYER, chemist and druggist, has been appointed overseer for St. Nicholas parish, Deptford.

MR. SAMUEL RALPH ATKINS, chemist, of Salisbury, has been elected unopposed the representative of St. Thomas's Ward, Salisbury, on Wiltshire County Council.

MR. JOHN WHITE, F.I.C., public analyst for borough of West Bromwich, and chief assistant to Dr. Bostock Hill, has been appointed public analyst to Derbyshire County Council at a salary of 350*l.* a year.

MR. HENRY TRIMBLE, Ph.M., professor of practical chemistry in the Philadelphia College of Pharmacy, has succeeded the late Professor Maisch as editor of the College's organ, *American Journal of Pharmacy*.

MR. J. LORIMER, writing from Bath, begs to thank numerous friends for their kind inquiries, and to state that under the skilful advice of Dr. J. Douglas Kerr, the eminent specialist, he is steadily recovering from an attack of rheumatic gout.

THE announcement is made this week of the marriage of Mr. J. F. L. Brunner with the daughter of Mr. Octavius Vaughan Morgan. Mr. Brunner is a son of Mr. J. T. Brunner, M.P., chairman of Brunner, Mond & Co. (Limited), of which company Mr. Brunner, jun., is a director. Mr. Morgan is one of the proprietors of THE CHEMIST AND DRUGGIST, was a member of the firm of Morgan Brothers, one of the founders of the Morgan Crucible Company, and the first M.P. for Battersea.

DOCTORING THE AMEER'S HOUSEHOLD.—Miss Hamilton, a lady doctor, has just left India for Cabul, where she is specially to attend on the ladies of the household of the Ameer of Afghanistan. While in Afghanistan she is to have a personal guard of six soldiers, three of whom will accompany her when she goes out. She is accompanied by one native Indian servant, and the Indian Government has disclaimed all responsibility for whatever may happen to her. The Ameer has engaged her services for a period of six months. Mr. T. A. Martin, the Ameer's agent, is now on his way to England.

DR. TILDEN, F.R.S., professor of chemistry at Mason College, has been appointed professor of chemistry at the Royal College of Science, South Kensington, in connection with the Department of Science and Art, in succession to Dr. Thorpe, F.R.S., who has been made chief chemist to the Inland Revenue Department. The *Birmingham Post* says:—"While Dr. Tilden may be congratulated upon the distinction thus conferred upon him, his removal from Birmingham will be much regretted by all who recognise his eminent scientific position, and the valuable service he has rendered to Mason College. He was appointed professor of chemistry at the opening of the college in 1880, and has been several times unanimously reappointed by the trustees, under the three-years rule which regulates the tenure of professorships."

A BRITISH LINSEED-OIL FACTORY IN ROUMANIA.—The high rate of duty for linseed oil imported into Roumania has led to the establishment of an English oil-factory at Galatz. This factory confined its operations to the importation of unboiled oil, and to boiling it and placing it on the market. The effect has been a very large falling-off in the importation of boiled linseed oil. At the close of the year 1893, when the tariff was changed in connection with the Commercial Treaty with Germany, and the duty reduced from 50*l.* to 35*l.* per 100 kilos., which may lead to a revival of the import both from Great Britain and Germany. The factory in question is now, however, setting up crushing machinery with a view to utilising the linseed grown in the country.

SIX MONTHS IN A FRENCH PHARMACY.

A PAPER READ BY MR. HAROLD WYATT, JUN., AT THE LAST MEETING OF THE LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.

ABOUT this time last year, fired by the glowing pictures which I had seen painted from time to time in after-dinner speeches and conference orations by those in authority over us, as to the enviable position of that much protected and professional individual, the foreign pharmacist, I decided to make an attempt to get into the enemy's country, and from the attitude of an assistant's position spy out the land. Of course I did not from one moment doubt the accuracy of the fairy stories I had heard concerning the entire superiority of the foreign article over the commoner English product, for, as all the adherents to the Pharmaceutical Society should do, I implicitly believed all that my mentors uttered, and allowed that the one thing necessary to pharmaceutical salvation was to go and imitate our fortunate foreign brethren as much as possible, and by contact with them acquire a little of their much lauded superiority.

With this idea in my mind I decided to locate myself in a foreign pharmacy for six or more months, and to this end I advertised in THE CHEMIST AND DRUGGIST for a position in France, as I possessed a good knowledge of the Gallic tongue. On going through the answers which I received one presented itself which seemed to be the very thing—a small pharmacy in a fashionable suburb between Paris and St. Germain. The salary was small as there were no English customers, but it seemed quite enough for a man of modest tastes, so I made up my mind to go, feeling sure, from the fact that my future master was a "pharmacien de la Ire. classe" and "ex Interne des Hôpitaux de Paris," that I had made a good choice, an opinion which was amply justified by further acquaintance.

The pharmacy had a pleasing exterior, sufficiently professional to please the most exacting; advertisements and goods on show were conspicuous by their absence, and the only means of recognising it as the abode of pharmacy was the presence of one or two of the familiar carboys of coloured water, and some vases of specimens. On entering, the greeting of my future "patron" was all that one could desire. The interior of the pharmacy was quite different from what we are accustomed to. There was no counter. The patron's desk, or "la caisse," took its place. This "caisse" had quite an ecclesiastical appearance, its sober colouring of black and gold and the carved work round the top gave it the air of a pulpit, whilst near to it was a smaller and similar erection for the deputy, or clerk. At the opposite end of the shop—I beg its pardon, the pharmacy—was the dispensing counter, and behind it a glazed door with tinted glass, leading into the "laboratoire." Over this door the imitation bronze bust of a patriarchal individual super-inscribed "Hippocrate" looked condescendingly down on his disciples with a high and lofty air as if he had just administered to them the Hippocratic oath.

The bottles, or shop rounds, were all capped with ornamental tin tops, only such as contained alkalis or acids being stoppered; all the others were corked. The labels were in Latin, those of the wide-mouthed bottles being stuck inside. The ointment pots were of a somewhat fanciful design, with a burnt-in coloured portrait of Galen or some such ancient pill-pounder on the front. The laboratoire—or, as we would call it, the back shop—contained a fair assortment of funnels, presses, and displacement apparatus, and in a small cupboard saccharometers, urinometers, and a set of burettes, as well as some very neat evaporating capsules made of solid nickel, which I afterwards found very useful and convenient at the dispensing-counter. The cellar, or *la cave*, where the mineral waters, oils, fluid extracts, and perfumed waters were kept, was reached from the *laboratoire* by stone steps, up and down which I travelled during my stay about sixty times a day. A fine, well-kept garden lay behind the house, filled with fruit-trees and, indeed, a little of everything, after the style of the "Swiss Family Robinson's" island, minus the zoological specimens. At one corner was an oriental-looking kiosk, rejoicing in the name of "Le Pavillon," used as a summer drawing-room, and at the top of the garden behind some small fir-trees a little cottage, consisting of

three rooms, a *baignoir*, or bath-room, on one side, a store-room at the other, and between a little bedroom, designed for the reception of the foreigner (myself).

From previous experience during several cycling tours in the north of France my capacity for surprise at novel arrangements on the part of the "darned Mounseer" was somewhat blunted; still the idea of putting such a prosaic creature as a chemist's assistant in a fair Rosamond's bower non-plussed me not a little. My "tool-house," as an irreverent brother dubbed it, besides its novelty, had many advantages which I discovered as time went on, not the least being its distance from the pharmacy, a space the "*sonnette de nuit*" could not bridge, rang it never so loudly.

The "patron," in showing me my domicile, poetically remarked that I should be awakened in the morning by the " *doux gazouillement des oiseaux et le chant bruyant de notre coq*"—the warbling of the birds and the noisy crow of the cock. He added that the perfume of the lilac, pinks, and wallflowers would mount even to my room, where I should be like a "*mi lord Anglais*" in his country residence, but minus the luxury of carpets, hangings, or—rent.

All of this was true, except that the cock was a bit ill-regulated, suffering from somnambulism, when he used to crow at the moon, under the impression it was dawn breaking. Then the poetical aspect of the picture faded somewhat, and I felt a desire to arise and hush his joyous chant.

Business began in the pharmacy every morning at 6 o'clock, when the porter, or "*Garçon de laboratoire*," to give him his awe-inspiring French appellation, came and opened the doors. I was supposed to be in at 7 o'clock ready for work, of which we had even at that early hour plenty, for the market took place every Tuesday and Saturday, and moreover the inhabitants were very religious so far as attending early mass went, and they dropped in on their way back, our establishment being on the highway to the church. These early customers usually wanted mineral purgative waters, the favourites of which were Janos, Rubinat, Montmirail, Eau de Glauber and Carabaña, and doses of Glauber's salt and Sel de Seidlitz, Epsom salts, as well as quite a respectable quantity of castor oil. The doses of these were surprisingly large—from 30 to 60 grammes (1 to 2 oz.) of the salts, and from 40 to 60 grammes (1½ to 2 oz.) of the oil being usually taken, and then a small foot-bath of Bouillon d'oseille to keep up the action. A whole bottle of Rubinat or Carabaña was the dose, but then the bottles of Rubinat were only a third of the size of those sold in England. The wealthier customers usually took "*Limonade Purgative*" similar to our *liq. mag. cit. effervesce.*, a dose containing about 30, 40, or even 60 grammes of true citrate of magnesia—a very palatable preparation and elegant-looking, for it was sent out in small special bottles, like miniature champagne bottles, with tin-foil round the neck.

We breakfasted at 8, after which we had usually a brisk run of business until 12, when we lunched, and could then take it easy for about a couple of hours, another rush of work taking place from about 5 to 7, after which we dined, and finally closed the pharmacy shortly after 9. This was the routine each of the seven days, for Sunday was just as busy as a week-day, but I got off one half-day a week and for a couple of hours on Sunday, so that I did not do so badly as many "*élèves*" in other places. The methods of working were, of course, entirely different to those I had previously been used to, so that it was, as the patron said, a second apprenticeship I had to serve. In dispensing all substances, solids and liquids were weighed, the bottle being placed on balance, counterpoised by means of shot, and then the ingredients of the prescription or "*l'ordonnance*" added. As will be seen at once, the volume varied with the density of the liquids used, and as the quantities were never ordered as in England, "*ad*" so-and-so, there were continual bothers with fractious customers because their bottles were not filled as full as they expected. The only argument for weighing offered was the self-evident truth that given weights are constant, and therefore accurate, whilst volumes vary with the temperature—a scientific theory, no doubt, but one which fails ignominiously in practice, for the simple reason that the mixtures are taken by measure, and therefore whatever slight advantage it might have been to make them by weight is entirely thrown away by the method of administering the finished product.

One very convincing reason for adopting this continental fashion was once given to me, and that was that it saved the washing of measures, but even this merit did not raise it in my estimation. The question of time is not of much importance, as by practice I found that there was not much to choose between our system and the French. Even the Codex tacitly admits that small quantities of potent remedies are more accurately measured than weighed, for there is a pipette or "compte goutte" ordered for measuring these.

One thing struck me especially, and that was the large use of herbs by the French pharmacist—they were sold loose and in packets to an extent which would surprise the English chemist. Those most in demand were chamomile, marshmallow, violets, roses, red poppy, cat's-foot (*Gnaphalium dioicum*), coltsfoot, mullein, elder-flowers, melilot, arnica, borage, lavender, the fruits of the winter cherry (*Physalis alkekengi*) and of the ordinary anise and the star anise, the roots of the parsley, asparagus, elecampane, chicory, couch-grass, comfrey (*Symphytum off.*) and houndstongue. Large use was made of the leaves of absinth, anemone, belladonna, centaury, hyssop, and mint. Cherry-stalks were also in demand.

The extract theriaque, consisting of fifty-seven ingredients, I found was very popular, and ext. dioscorium with seventeen ingredients seemed to hold a good position in public esteem.

The tinctures were simply made by maceration, and were not made up to any given quantity, and in addition to the ordinary preparations I found that there were also "alcoollures," or tinctures made from fresh plants such as aconite, arnica, anemone leaves, belladonna leaves, &c.

As to syrups, their name is legion, and they constitute a large proportion of the stock of a continental pharmacist. The making of pills did not strike me as being perfect in any sense, and I fancy that I have left behind me much better methods in the Pharmacy than I found, but while the pill of the pharmacy leaves much to be desired I may say I saw some capital pills made by a Parisian house and recently mentioned in THE CHEMIST AND DRUGGIST, where the name of the pill had been legibly stamped upon each one. They were well made, and were a decided novelty. While they do not excel as pillmakers they put up an enormous numbers of cachets, and this is most puzzling at first to the novice. Many ingenious machines are made for filling them, &c., but once the practice is acquired they can be rapidly prepared (Mr. Wyatt illustrated this part of his lecture, rapidly filling and completing some specimen cachets).

Suppositories and kindred preparations can be subjected to the same criticism, as I found that they were invariably lacking in finish and neatness compared with the English article. The sizes were also much larger than we are accustomed to use, and seemed to harmonise in proportion with the doses of purgatives to which I have already referred.

In conclusion I must say that my stay in "La belle France" was on the whole a most happy and profitable one. I learned much that was interesting and valuable to me as a pharmacist, and at the same time had the privilege of residing for some time in a foreign country and forming associations which will afford food for pleasant recollections for many years to come. Given a fair knowledge of the language, I can strongly recommend any Englishman to repeat my experiences.

OUR "DIARY" COUPON FOREIGN COMPETITION.

WHEN awarding the prizes for our home DIARY Coupon Competition we stated that three out of the ten guineas to be divided had been earmarked for distribution among foreign and colonial competitors, whose coupons were allowed to bear a postmark up to January 31. The response from this section of our subscribers has been excellent, but upon the whole, the guesses have not been so good as those of home subscribers. The following are the answers to our ten questions which unite the large number of the voters:—

1. The most effective advertisement—
Burroughs, Wellcome & Co.'s, pages 145-172.
2. The most striking feature among the advertisements—
Bowers Brothers' cocoanuts, page 95.
3. The best illustration—
Richardson & Co.'s building, page 229.

4. The best speciality title—
"Pepsalia," page 58.
5. The best trade-mark—
The "Heron," page 208.
6. The most tempting article from a business point of view—
G. & G. Stern's "Pepsalia," page 58.
7. The best full-page advertisement—
Day & Sons', page 50.
8. The best half-page advertisement—
Garthwaites' fish biscuits, page 57.
9. The best advertisement of less than half a page—
C. Dix's "Norse Sea-cream," page 269.
10. Your favourite firm—
Burroughs, Wellcome & Co.

It will be seen that the preponderant opinion of our DIARY advertisements held by our subscribers abroad is curiously similar to that entertained at home, the only answer in which the foreign and the home readers differ being that of the best speciality title—"Pepsalia" being the favourite abroad, and "Oil of the Night" at home. In the first and second questions the decision is given by a very large majority, but Richardson's building (question 3) wins the first place by a majority of only 3 over Armbricht, Nelson & Co.'s illustration on page 22, while Day & Sons' "Devils" found many admirers. For No. 4 "Oil of the Night" is the only serious rival to "Pepsalia," and the "Heron" in No. 5 has over one-third of the votes all to himself. "Pepsalia" is fairly hard pressed by Pears' soap, and Bowers' printing as the most tempting articles from a business point of view. For the best full-page advertisement Bowers Brothers, Bromley's gout and rheumatic pills, and Ewen's lard make respectable appearances, while F. W. Sears, the Fly Cemetery, and Waterston & Sons have many backers as the best half-page. The closest struggle of all is for No. 9. There was a tie here between Dr. Ridge's food and the "Norse Sea-cream" up to a few days ago, when the last coupon, dated January 31, came in and turned the cream-scale downwards. Pearce & Meeking were only 6, and the Dorothy Dentifrice 12, votes behind the winner.

One competitor has given nine correct answers to the ten questions, two have given eight right, one seven, and twelve six each. To the nine men we award a prize of 20s., the two guessers of eight questions will receive 10s. each, 7s. 6d. goes to the subscriber who answered seven questions correctly, and the twelve sixers will receive a remittance of 5s. each. The total amount we shall give away is, therefore, 5l. 7s. 6d. instead of 3l. 3s. The great bulk of the competitors return correct answers to from two to four questions. These must hope for better luck next time.

The prize-winners are:—

- Mr. WM. H. BECK, pharmaceutical chemist, Moonee Ponds, Victoria (20s.).
 Mr. L. E. O. READY, Penguin, Tasmania (10s.).
 Mr. FRANK H. HANCOX, P.O. Box 305, Kimberley, South Africa (10s.).
 Mr. OLAF F. S. BEICHMANN, M.P.S., 202 Abbotsford Street, Hotham Hill, N. Melbourne (7s. 6d.).
 Mr. E. I. HOLIFIELD, 37 Avenue Marceau, Paris (5s.).
 Mr. WM. J. LOVELY, O'Connell Street, N. Adelaide, South Australia (5s.).
 Mr. ROBT. W. BORTHWICK (Manager to North & Rae, Limited), 79 Main Street, Yokohama, Japan (5s.).
 Mr. CHAS. R. HOLOVER, Richmond House, Galles Street, Adelaide, South Australia (5s.).
 Messrs. HOOD & Co., Haywards, Alameda County, California, U.S.A. (5s.).
 Mr. WM. R. WATSON, Charlottetown, Prince Edward's Island, Canada (5s.).
 Mr. THOS. RUSSELL, Symond Street Pharmacy, Auckland, N. Zealand (5s.).
 Mr. R. M. GREEN, care of F. White, chemist, Wellington, N. Zealand (5s.).
 Mr. R. SPENCER, Te Ahi Ahi, Auckland, N. Zealand (5s.).
 Mr. R. S. POYNTER, care of George W. Towl, Avoca, Victoria (5s.).
 Mr. J. H. KIRKBY, care of George Mee, pharmaceutical chemist, Wellington, N. Zealand (5s.).
 Mr. A. C. ANDREW, 11 High Road, St. Thome, Madras, India (5s.).

Bankruptcies and Failures.

Re CORNET, JONES & Co., Lynton Road, Bermondsey, Chemical Manufacturers.

UNDER a receiving order made at the London Bankruptcy Court last month upon a creditor's petition the usual summary of accounts together with the observations of Mr. (J. Wreford, Official Receiver, were issued to the creditors on Monday last. The unsecured debts are returned as 180*l.* 4*s.* 10*d.*, and there are certain contingent liabilities (amount unknown) in respect of a guarantee, and a possible liability under the lease of the premises. The assets disclosed are bad book-debts, 75*l.*, estimated to be of no realisable value; and debentures and claim on the limited company that was formed to acquire the business. According to the observations of the Official Receiver, the bankrupt, Alice Jones, states that she has not been in partnership with any person, and has no knowledge of "Victor Cornet," described as a partner in the bankruptcy petition. That the business was established for her benefit in 1885 by a friend, under the style of "Cornet, Jones & Co.," and was transferred to a company in August, 1891, in consideration of which the bankrupt was to receive 700*l.* in cash and certain debentures and shares; but she has received the debentures only. That the company has been unable to continue the trading, owing to insufficient capital having been subscribed. That her insolvency is attributable to loss on trading, and to failure of the company to carry on the business.

The bankrupt attended before Mr. Registrar Giffard last Wednesday for public examination. She was questioned at length by Mr. G. Wreford (Official Receiver) respecting the circumstances under which the business was formed and transferred to the United Salt Patents (Limited). The bankrupt added that they had not manufactured the salts for some time past, but under favourable conditions they could be produced at a profit of 10*l.* per ton. Her failure was caused by the company not carrying out the contract for the purchase of the business, and the company's failure to do so was due to insufficient capital. The examination was ordered to be concluded.

Re HERBERT ASHTON FULCHER, 124 High Street, Tewkesbury, Chemist.

THE following are creditors in this recent failure:—

	£	s.	d.
Barclay & Sons, London	63	0	0
Fowler, C., Tewkesbury	25	18	5
Hodgkinsons, Treacher & Clarke, London	33	7	6
Kinmond & Co., Leamington	32	6	8
Rue, Wm., & Co., Tewkesbury	17	6	4
Schweppe & Co. (Limited), Bristol	34	0	0
Sharpe Brothers, London	14	5	9
Sonthall Brothers & Barclay, Birmingham	49	11	2

Creditors Fully Secured.

Badham, H. A., Tewkesbury	82	16	0
Fulcher, G. P., Tamworth	325	0	0
Thomas, Edward, Tewkesbury	750	0	0

Creditors Partly Secured.

Bishop & Son, Tewkesbury	40	0	0
Estimated value of security, 12 <i>l.</i> 4 <i>s.</i>			

Preferential Creditor for Rates, &c.

Owen Brookes, Tewkesbury	15	7	4
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Re JOHN SCAIFE, late of 10 Mincing Lane, E.C., and Liverpool, Chemical Merchant.

THE public examination of this bankrupt came on for hearing last Tuesday, at the London Bankruptcy Court, before Mr. Registrar Linklater. The accounts show unsecured liabilities 1,314*l.* 2*s.* 6*d.*, and no available assets.

In the course of the proceedings the bankrupt stated that in 1884 he purchased the business of a manufacturer of dry-saltery and chemical products, then being carried on at Fenchurch Street, London, with branches at Liverpool and

Dublin, under the style of Dubedad, Adams & Co. He gave 100*l.* for the goodwill and the right to use the name of the firm. After twelve months he converted that business into a limited company, entitled "Dubedad, Adams & Co. (Limited)." The capital of the company was 10,000*l.* Witness received 1,000*l.* in fully paid-up shares, and was appointed joint managing director, at a salary, part of which was retained against payment of another 1,000 shares, for which he subscribed. The company was wound up in 1887. Witness still held the certificates of the shares, allotted to him, and would forward the documents on to the Official Receiver. In 1890 he, jointly with Mr. Swann (one of the shareholders of the defunct company), bought the business from the liquidator, and subsequently Mr. Swann sold his share of the concern to witness for 300*l.* That money was not paid over, and Mr. Swann ranked as a creditor at the present time. When he entered into the agreement witness was probably insolvent if his indebtedness to his wife was taken into consideration. He continued the business alone at London and Liverpool until 1892, when he closed the Liverpool branch and moved from Fenchurch Street to Mincing Lane. In May, 1893, he was joined in partnership by a Mr. Langton, and in the following December that gentleman purchased his share for 500*l.*, payable by annual instalments of 100*l.*, subject to certain profits being made on the trading. Nothing had been paid to witness under that arrangement. In October, 1893, he also entered into partnership with another person and they traded at Mitcham as the "Amber Varnish Company." That venture was not a success, the trading was carried on at a loss, and in February, 1894, the business was sold to one of the principal creditors.

The bankrupt was questioned at some length by creditors, and the examination was then ordered to be concluded.

Gazette.

PARTNERSHIPS DISSOLVED.

Bate, A. T., and Moody, C. B., under the style of A. Rueh & Co., Laurence Pountney Lane, E.C., glass-bottle importers.

Hinds, J., and Hinds, J. H., under the style of J. Hinds & Co., Coventry, mineral-water manufacturers.

Johnson, F. H., Gill, W., Hepworth, J. T., Dearden, J., Hayley, H., and Robinson, G., under the style of F. H. Johnson or F. H. Johnson & Co., Rastrick, Yorkshire, aerated-water manufacturers.

Kitching, A., and Davy, D. H., under the style of Kitching & Davy, Kingston-upon-Hull, surgeons.

Sumpter, H., and Greenwood, E. D., under the style of The Diana Bleaching & Polish Company, Blossom Street, Norton Folgate, Bishopsgate Street Without, E.C.

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATIONS.

Baras, Samuel Henry, Bristol and Tonypandy, dealer in photographic apparatus materials and fancy goods.

Groves, Leonard, Mark Lane, E.C., chemical agent.

Hickley, Thomas Henry, Burton Road, Kilburn, N.W., late Broadhurst Gardens, West Hampstead, N.W., late carrying on business at Leicester Square, W.C., Panton Street, S.W., Broadhurst Gardens, N.W., High Road, Kilburn, N.W., and Burton Road, Kilburn, N.W., traveller in dental goods, late dealer in dental goods.

Talbott, Harry Criebley, Dalebury Road, Upper Tooting, S.W., late Boar's Head Yard, King Street, Westminster, S.W., and Ormond Yard, York Street, St. James's, S.W., veterinary surgeon and farrier.

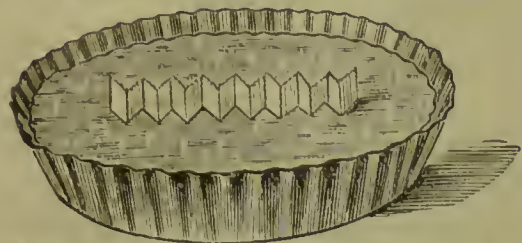
ORDERS MADE ON APPLICATIONS FOR DISCHARGE.

Morton, Henry Enoch Macdonald, Flusbury Park Road, South Horsey, N., patent-medicine vendor—discharge suspended for two years, ending March 12, 1896.

Twinberrow, James Kimberley, Wigmore Street, W., Westbourne Grove, W., and Ennerdale, Rydal Road, Streatham, S.W., late Priory Road, West Hampstead, N.W., chemist and druggist—discharge suspended for two years, ending March 13, 1896.

Zimmermann, Charles Hermann, late trading as the Sozen Oil Company, Manchester, merchant and manufacturer—discharge suspended for two years, ending March 7, 1896.

KINGZETT'S PATENT SULPHUR FUMIGATING CANDLES ARE FAR AHEAD OF ALL OTHERS.



TRADE TERMS:
6d. Candles,
3/10 per doz. net.
1s. Candles (water
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They are lighted
with the greatest
ease, and burn
steadily and thor-
oughly, ensuring
more secure disin-
fection than any
others.

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DO NOT FAIL TO STOCK!

It sells well wherever introduced, and bears a
good profit.

THIS POPULAR
LAXATIVE

Cascara Jelly.
The most Palatable Preparation of Cascara Sagrada.

Is thoroughly
efficacious, and very agreeable
in taste and flavor.

In 2 oz., 4 oz., 8 oz., and 1 lb. glass jars.

Price on application to the Manufacturers.

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15 Laurence Pountney Lane, LONDON, E.C.

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BOISSY late GALLOIS

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"BY the use of FLETCHER'S CONCENTRATED LIQUORS all
the trouble and annoyance of variety of colour and
strength, which is so frequent in our fresh infusions, is avoided,
and this, so far as we could trace, WITHOUT ANY SACRIFICE
IN THE THERAPEUTIC POWER OF THE DRUG, OR IN THE
PHYSICAL CHARACTERS OF THE PREPARATION."

Editorial Comments.

THE SPIRIT-DUTY AND CHEMISTS.

THE Budget resolutions again hit retail chemists hardly and
unfairly. A considerable proportion of traders in all busi-
nesses, chemists among the rest, will come in for the relief
proposed to persons whose incomes do not exceed 500l. per
annum. But in the case of pharmacists this benefit will be
far more than neutralised by the addition of sixpence per
proof gallon on spirit.

The country generally regards this tax as if it concerned
spirit-distillers and publicans only, and the Chancellor of the
Exchequer probably never thought about pharmacists at all
when he planned his scheme. Nor are we at all sure of
getting any member of Parliament who will undertake to
submit our grievance to the Committee of Ways and Means.

There are no statistics available to show how much of the
spirit on which duty is paid is consumed in the form of
medicine. A rough guess would place it at less than 10 per
cent. We are asking chemists to give us some basis to
reckon on, and if a few hundreds only will answer our ques-
tion, we shall be in a better position for formulating a claim
for redress if anything like an opportunity should occur.

The spirit-distiller is scarcely affected by this increase of tax, except in so far as it may check trade. He adds the extra duty to his price, and has done with it. The wholesale druggist actually benefits by it. He pays an extra 6*d.* per proof gallon, and adds 1*d.* per lb.—say 9*d.* per gallon—to his charges for proof tinctures. He did this when Mr. Goschen added 6*d.* to the duty in 1890, and he has done it again this week. Moreover, he gets a bonus by adding this increase to his prices promptly, though he probably has some hundreds—perhaps thousands—of gallons of spirit and made tinctures in stock. A few more sixpenny additions will make the fortune of the wholesale druggists. The publican, too, who sells spirits mostly by the three or four pennyworth, can easily recoup himself and more. To the retail pharmacist, however, no such course is open. His tinctures are sold by the ounce, and the difference in cost on each ounce is too insignificant to allow of an increased charge; but he has to lose in the aggregate all the same.

When the previous addition of sixpence to the spirit-duties was made by Mr. Goschen in 1890, an amendment to the proposal was submitted by Dr. Tanner when the Bill came before the House of Commons, the effect of which would have been to exempt from the extra duty all "spirits taken out of bond for *bonâ-fide* medical purposes." There was a good deal of sympathy with the object of the amendment, but Mr. Goschen said it would be impossible for the Customs or the Excise to earmark the spirits taken out of bond for medical purposes, and Dr. Tanner's benevolent intentions were defeated by 127 votes to 73. He will probably make his demonstration again this year; if he does not, Mr. Townsend, one of the members for Bristol, might be available. He is certainly qualified to represent efficiently the chemists' position.

PUSHING A SPECIALITY.

THE recent "How to Advertise Liver-pills" competition, finally decided in the present issue, has served to indicate a considerable amount of interest existing among readers of THE CHEMIST AND DRUGGIST in the subject of chemists' specialities.

Whilst most chemists put up one or two proprietary lines, with or without the stamp, for sale at their own counters, it is, comparatively speaking, only a few who seriously aim at an eventually more extended popularity; and it is not a large proportion who advertise in the local papers. Most chemists are content to leave the counter to do the selling. Yet proprietaries with only a local sale, even, are often "good business." There are at least half-a-dozen of the leading ones which began life as simple counter-adjuncts of retail chemists—a fact which goes to show the possibilities of the business; and under the present system of excessive cutting, it is inevitable that chemists should be driven to contemplate, and should often put into practice, the policy of putting before their clients "as good an article" at the same price, and with greater advantage to themselves.

Some authorities have urged that it is wise to have a full line of nostrums to match the whole lot of the cut medicines. Each man must judge for himself; but, in our opinion, this is unwise. Among Goldsmith's innocent villagers the wonder about the schoolmaster "grew, how one small head could carry all he knew"; but probably they never doubted that he possessed all the knowledge he professed to have. The public is now more sceptical. They may accept the theory that your cough-mixture is the best on earth, but they will begin to suspect you if you assume to have discovered the most perfect remedy for every kind of complaint. They will soon see the game, too, if they find

that, no matter what they ask for, there is always a substitute recommended. One or two good specialities may be pushed, and a really good one may be now and then floated into something beyond local fame.

We have often remarked that it is as yet, at all events, impossible to analyse the exact elements of success in the patent-medicine trade. We hear of the comparatively few triumphs, but nobody remembers the multitudes of failures. We do not advise anybody who has less than 100,000*l.* which he can afford to lose to start on the career of a great patent-medicine man. But we may consider, briefly, what are the attributes of a speciality which has a fair chance of success, and how may its sale be best pushed. Is it practicable to make a sale for such an article outside of one's own shop? And how may a small expense on these lines be made to give the best proportionate results in practice?

In the first place, naturally, a successful proprietary must be one which is needed by the public in the place and at the time that it is advertised. It is easiest to work up a sale for anything which produces some immediate and unmistakable result. For this reason a purgative of any kind is generally a good seller. Purchasers cannot help perceiving that they have got a result for their money. Therefore, in determining the formula for a speciality of any kind, it is a good plan to select one that will show some immediate effect, whether the remedy be a cough-mixture, a liver-syrup, a tonic, a teething-powder, or what not. The medicine itself should be as elegant in appearance as practicable; it may or may not be wise to make it agreeable to the palate. There is a strong tendency to believe in a medicine that is nasty, but it should certainly be neatly put up. In regard to the latter point, it is desirable to adopt as distinctive an appearance as possible, so that the package, in the event of its getting into general sale some day, may be readily recognisable and not easily mistaken in appearance. A good title, capable of being registered as a trade-mark, is also an advantage; and given this the title should be registered at once. The Government fees for registering a trade-mark amount to 1*l.* 5*s.* in an ordinary case, and a patent-agent will advise on the subject and see the whole thing through, generally, for about 3*l.* 3*s.*, fees included. There is very little use, however, in merely registering labels. If the title is not registrable, adopt a design to go on the label and register that. Even that will only be useful, however, if the medicine should happen to get a reputation abroad and sell by its mark. As a rule, it is the title and general get-up which become of value. A "descriptive" title is not registrable, and recent decisions of the Courts have made it somewhat difficult to hit on a name that will be admitted to registration. The advice of a good patent-agent on this point will be found useful.

It is a poor economy to attempt to avoid the necessity of stamping: this can, as a rule, only be done by tying one's hands in advertising, for any kind of advertisement, whether issued with the package or not, affects the liability of the medicine to stamp-duty. The law on the subject is admirably summarised in Alpe's "Handy-book of Medicine-stamp-Duty," which indicates exactly when and how medicines become liable to stamp-duty.

These preliminaries having been settled, a label of directions, and probably a printed wrapper, will need to be prepared. There is only one rule for these things. They must be as plainly and simply written as possible. A long word should never be employed where a short one will do the work. It is hardly necessary to add that the wording must throughout be scrupulously delicate and modest. If the formula can be so arranged as to admit of some such statement as "This medicine is absolutely free from poison of

any kind, and is perfectly safe, no matter how large a dose may be accidentally taken," it is a great advantage, and gives the remedy popularity on the grounds of its perfect safety.

The medicine being now ready for sale, the next question is "To advertise, or not to advertise?" If any extensive sale is hoped for, advertising is a necessity. The local newspapers will naturally be chosen for a beginning. As good a position should be obtained for the advertisement as possible. That is to say, it should be placed near the most interesting reading in the paper, and, if possible, away from other advertisements. In small towns, it will probably not be difficult to get the editor of the local paper to insert a short editorial notice of the article, when the advertisement is ordered, and from this notice a suitable passage may be with advantage quoted in the advertisements.

The advertisement itself will naturally be written with a more careful eye to its general effect upon trade than some of the postcards reproduced in connection with the late competition. It would be folly to use an advertisement calculated to offend the local doctors, or to give the advertiser a reputation for flippancy or vulgarity. It is a mistake to say too much. The name of the remedy, and its purpose, should stand out well in bold type, and any descriptive matter that is added should be convincing, modest, and terse. Some newspapers admit illustrations, and a well-drawn block no doubt gives attractiveness to any advertisement. A distinctive border to the advertisement is useful, also, serving to mark it out from other announcements. Most newspaper offices can furnish a suitable border, or it may be well to have one specially designed, and made into a block. Testimonials are pretty sure to come if the medicine is good for anything, and they will carry great weight, especially in cases where the writer is a person of some little note, and can be prevailed upon to allow the publication of name and address. Anonymous or initialed testimonials do not command confidence, and are worse than useless. It is a good plan to change the advertisement frequently, but to keep it always in the same part of the newspaper, and also to retain some distinctive feature, such as border, illustration, or head-line, with each insertion, so that the announcement may be easily recognised. The attempt to disguise an advertisement—to deceive people into the belief that it is something else—is a mistake.

It will be well to exercise a little diplomacy in placing the order for advertisements. Country newspapers have usually some elasticity in their rates, and, indeed, advertisers in London, or at a distance, can usually engage space at lower rates than can be secured for goods made locally. Advertisements are the life-blood of local newspapers, and the latter are bound to have them at some price or another. It behoves us to see that we get our space as cheaply as we can. An offer to use a larger space than is first inquired about, or to take more frequent insertions, on condition of a reduction in the rate per inch, will be the kind of diplomacy to exercise. The newspaper advertising will be assisted and supported by an occasional and careful distribution of hand-bills or printed matter from house to house throughout the town and district.

Until they are forced to it, neighbouring chemists will naturally be reluctant to sell your article; but if two or more are selling different specialities in the same town, it may often be possible to arrange an exchange of interests. In such cases, however, it will always be wise to stipulate that the full retail price of the medicine shall be maintained.

Judiciously pushed and advertised on these lines, carefully looked after and fostered, there is no reason why a good retailer's proprietary should not go from strength to strength,

until, the advertising being gradually pushed out into the Press of neighbouring towns, a sufficient vogue is created for the article to justify some general advertising, when, with a suitable proprietary, there is hardly any extent to which the sale may not grow. To the successful proprietor we would only say, When the day of success comes, and you are a large advertiser, do not forget the interests of the retail chemist, and he will remember yours.

THE GERMAN CHEMICAL INDUSTRY.

In November of last year we commented upon the crisis through which the German pharmaceutico-chemical industry was then passing, and on the gradual tendency towards a decline in the dividends of many important factories. At that time the condition of trade looked particularly black for the German chemical industry. Almost all foreign countries to which it exports were passing through more or less acute commercial crises. The tariff-war with Russia was in full progress, and showed no signs of speedy termination, and from all parts of Germany came grievous complaints of want of markets for the aniline dyes and pharmaceutical chemicals which are among the principal export articles from that country. Since then the sky has very much brightened, and during the last five or six weeks there has been a general and marked rise in the quotations of chemical shares on the German Stock Exchanges. Our contemporary the *Pharmaceutische Zeitung* mentions a dozen or so of the principal concerns of which the shares have been affected by this sudden boom. The list will be interesting to our readers, and we therefore reproduce it below:—

	Last Dividend	Share Quotation			Rise, Points
		Feb. 28	Mar. 22	Mar. 28	
Badische Anilin-fabrik, Mannheim ..	27	338	353½	378	40½
Höchst Anilin-fabrik (formerly Meister, Lucius & Brünig) ..	26	343½	355	370	26½
Deutsche Gold und Silber Scheide-Anstalt (Frankfort-o. M.) ..	15	235	249	251	16
Chemical-works, Griesheim ..	16	234	242	247	13
" Weiler ..	14	177½	18½	192	14½
" Schering ..	19	257½	280	295	37½
Oranienberg Chem. Factory	5	73½	76½	87	13½
Stassfurt ..	9	163½	164½	166½	3
Leopoldshall ..	3	85½	89	93½	8½
Elberfeld Aniline-works (Bayer & Co.) ..	18	243	256½	266	23
Askania Company ..	8½	131	149½	165	24
Soda Factory, Aschersleben	10	148½	159½	167	18½
Westeregeln Chemical Factory ..	0	146	149	155	10

The run has been caused chiefly by the ratification of the Russo-German Commercial Treaty, which again opens the important Russian market to the products of the German dye and chemical factories. To some German factories, such as Schering's chemical-works in Berlin, the reopening of the Russian market has been an undoubted boon, and the rise in their shares is accordingly considered to be well justified; but it is pointed out, with apparent reasonableness, that, upon the whole, the chemical industry of Germany has suffered less from the effects of the Russian Tariff war than any other, inasmuch as its products are either so necessary to the Russian consumer that even the increased duty has not prevented their continued importation, or because the factories affected have their own works in Russia. To the latter class belong such large factories as Meister, Lucius & Brünig, the Badische Anilin- und Soda-Fabrik, the German Solvay works, and others. The depression in the share-value

of these factories last autumn was no doubt largely the work of unjustifiable speculation, and the same may be said of their recent sudden boom. When the rumour gained ground that the dividend of the Badische Anilinfabrik would exceed the expectations, its shares advanced 15 per cent. in one bound, and "bull" speculation in the shares of the Meister, Lucius & Brüning's factory was carried to such an extent that the official price-list of the Berlin Stock Exchange was compelled to cease quoting them, as they could not be obtained even at 30 per cent. advance on the highest point.

Schering's chemical-works in Berlin will pay a dividend of 19 per cent. for 1893, compared with one of 20 per cent. for 1892; the Badische Anilinfabrik distributes 10 per cent., against 9 per cent. the year before. The Farbwerke, vormals Meister, Lucius & Brüning, at Höchst-on-Main, report that, notwithstanding many influences unfavourable to the development of their industry, the value of the company's sales of coal-tar products reached a considerably higher figure in 1893 than in 1892. The continued expansion of the business has rendered necessary a large extension of the works. The net profit for 1893 is 1,671,599m., against 1,344,195m. in 1892, and the shareholders will receive 28 per cent. dividend against 26 per cent. the year before. The company now owns 12,000,000m. worth of real property, and possesses an active capital of 17,000,000m. The chemical-factory at Billwärder, near Hamburg (formerly Hell & Sthamer), had not quite as favourable a year in 1893 as in 1892, although still in a position to pay an 8-per-cent. dividend, compared with 9 per cent. in 1892. The company's gross receipts from sales were 620,665m., against 612,879m. in 1892, but the rate of profit has been less, the total net profit being only 241,928m., against 280,155m. in 1892.

Chemical-factories of which the products are not so closely allied with pharmacy as those of the foregoing appear generally to have had a good year, although in many instances the profits have failed to reach the high figures of 1891 and 1892. Thus the chemical-products factory at Pommerenzdorf, near Stettin, has made a gross profit of 394,134m., of which, however, only 150,000m. is divisible among shareholders, the rest being written off, divided among directors and employés, and used (to the extent of 20,229m.) for purposes described by the Mark Twainian word of *Arbeiterwohlthatseinrichtungen*, which, translated, means institutions for the well-being of workmen. The shareholders in the Chemische Fabrik Buckau, of Magdeburg, have a net profit of 318,622m. to divide, which will give them a clear 8 per cent. on the nominal value of their shares. Trade, say the directors of the company, has generally been favourable, but only by the most strenuous efforts has it been possible to secure a large enough sale of the factories' goods to enable the works to carry on operations without intermission. The alkali-factory at Westeregeln, which has paid no dividend for some time, appears likely to distribute 5 per cent. for 1893. Georg Egestorff's salt-works will increase the 1892 dividend of 8 per cent. to one of 8½ per cent. for 1893, and the chemical-factory "Askania" at Leopoldshall, having earned 50,338m. net profit, against 17,560m. in 1892, has been able to increase its dividend from 3 to 8½ per cent. The annual report issued by the directors of the united chemical-works "Silesia" is of a most roseate description. The sales of this corporation, which manufactures alkali, chlorates of potash and soda, and other heavy chemicals, have amounted to 7,891,470m. last year, of which 1,784,430m. was profit. The report calls attention to the coming changes in manufacturing processes that are now casting their shadows over the heavy chemical industry. In the Prussian province of Saxony, for

instance, two large factories for the electrolytic decomposition of chloride of sodium and potassium are now in course of construction, and will probably commence working this year.

VINEGAR IN CANADA.

Mr. Thos. Macfarlane, the chief analyst at Ottawa, deals, in a recent bulletin to the Commissioner of Inland Revenue, with the vinegar question. The discussion and prosecutions which have occurred in the mother country are the immediate cause of the bulletin, and on these Mr. Macfarlane treats fully. Discussing the application of the Birmingham decision to Canada, he mentions that there is no standard for vinegar in the Dominion, and the article most favoured there is made from spirit. There are sold under the name of vinegar, with various prefixes, not only imported malt vinegars, but also articles made from spirit, beer, fruit-juices, and strong acetic acid. Large quantities of the latter, made from wood, are imported for making vinegar by dilution and colouring, and the manufacture of strong acid from imported acetate of lime has already been established for the same purpose. Mr. Macfarlane has analysed trade samples of vinegars and acetic acid, and concludes from his study of the question that the English practice should be adopted—viz., to insist upon a vinegar being what it is called, "malt vinegar," "cider vinegar," &c., the standard of acidity being fixed at that of the British Pharmacopœia. This recommendation implies that vinegar will be brought under the Adulteration Act of Canada, which it has not yet been owing to the want of a standard to go by.

AMERICAN DENTAL COMPETITION.

The *Medical Press* has awakened to the fact that the General Medical Council is "making itself the servant of the British Dental Association," especially in regard to the refusal to register American dental diplomas. This course was taken as was pointed out in THE CHEMIST AND DRUGGIST months ago, because the American Universities have notions lower than the General Medical Council in regard to preliminary education. Our contemporary advances another reason—viz., that "the British Dental Association has found the professional competition of the American registered dentists to be inconvenient, and it has put pressure upon the General Medical Council of sufficient force to secure the disfranchisement of all foreign dentists and the abrogation of the powers of the Council in respect of foreign registration." There may be something in this. What do the dentists say to the charge?

COMPETING WITH "THE SQUARE."

"Competition is always useful; the public will gain much from its presence in this particular instance." That is a medical contemporary's view of the Pharmacy Act prosecutions at Leeds. It is the competition between the Pharmaceutical Society and the Patent-medicine Defence Association that is referred to. More care on the part of the legal retailers of poisons is also hinted at.

PATENTS FOR POISONOUS MEDICINES.

The Pharmaceutical Council have squelched another patent medicine in its cradle. We directed special attention to that particular specification in our issue of December 23, 1893. Letters patent were granted to Mr. Rendell, of 33 Warwick Road, Earl's Court, for a compound of equal proportions of sal volatile, peppermint, spirit of camphor, and laudanum. Mr. Rendell did not patent this mixture with any view of evading the provisions of the Pharmacy Act. This appears from the statement of his counsel. He has, however, realised that his combination is not so novel

as to justify his claim of an exclusive right to make it, and on that ground he consents to a revocation of the letters patent. It may encourage other persons who may propose to acquire patent-rights for medicinal compounds to know that in this case the patentee is charged with the costs of removing his invention from the list, which will no doubt be many times the expense incurred in getting it on.

SHORTENING THE STATUTE OF LIMITATIONS.

A Bill has been introduced into the House of Lords by the Lord Chancellor entitled "The Limitation of Actions Bill." One of the objects of the measure is to fix the time within which actions of tort can be brought to one year from the occurrence of the cause of action or from the date of the discovery of such cause. More important to the business classes, however, is the proposal, also contained in the Bill, to reduce the period within which actions for debt can be commenced from six years to three years, and in the case of debts not exceeding 5*l.* to one year. The intention of the Lord Chancellor, which is no doubt to check the credit system, is one with which we are entirely in sympathy; but this proposal, as every retailer knows, is too far in advance of the existing custom of trade to be useful. A year's credit for small amounts—or for that matter for large ones also—is longer than any honest person's convenience demands, but it is still practically in operation, and it would be very unjust if a debtor could refuse payment of a small account on the ground that he had successfully evaded it for just beyond a twelvemonth. There is no good reason, so far as we can see at present, for distinguishing in this matter between small accounts and larger ones. The three-year limit of credit will be quite a sufficient reform to carry for the present.

CANADA NEWSPAPERS WANT FREE IMPORTATION OF PATENT MEDICINES.

According to the *Montreal Pharm. Journal*, "the newspapermen of the Dominion have approached the Government requesting that patent medicines be placed upon the free-list." The Canada newspaper-man is a little too clever or not quite clever enough. If he wants free trade he has a splendid opportunity just now of advocating it; but his protectionist readers will have no difficulty in seeing through his desire to benefit them by admitting specially the products of the best advertisers.

A FOUR-HUNDRED-DOLLAR TAX ON DRUGGISTS.

The Board of Aldermen of the city of Doniphan, in the State of Missouri, have recently cast their eyes abroad to see whom they could devour in the taxation-feast, and their eyes lighted upon "druggists, pharmacists, and apothecaries doing business as such in the city of Doniphan," and they have ordered each of them to pay a tax of \$400 for one year. But they consider that the tax will be an annual one, and the aldermen also decree as follows:—

It shall be unlawful for any person or persons, in the limits of this city, after the taking effect of this ordinance, to engage in the business of a druggist, pharmacist, or apothecary, by selling, dispensing, or giving away any drugs, medicines, poisons, or intoxicating liquors of any kind, without first taking out a licence, &c.

The fine is to be not less than \$25 nor more than \$100. It seems that there are five druggists in the city of Doniphan, and already they have proved too much for the Board of Aldermen, as they have got the County Court to restrain the ordinance, and the *National Druggist* considers that it is *ultra vires*. The whole matter seems to have arisen from consideration by the City Council of the right of druggists to sell liquor on prescriptions; but if a temperance druggist were opening in the city we suppose he would have to pay,

liquor or no liquor. That is what the ordinance means, and the tax is far too stiff in these days of cut rates. It will stand on record, however, as the severest thing yet attempted to damp the ardour of the struggling pharmacist.

A SOURCE OF ERROR IN LARD-TESTING.

Mr. E. J. Bevan has recently pointed out to the Society of Public Analysts a sure source of error in the silver test for the detection of cottonseed oil in lard. Working with a sample which he knew to be pure lard, he was astonished to find that it reduced the silver solution. He ultimately found that it was only that portion of lard on the surface, or which had been exposed to the air, which so acted, and the lower portion gave no reduction. Similarly in a bladder of lard that which was next the skin reduced the silver solution, but not the lard in the interior of the bladder. This observation is one of considerable interest to pharmacists, who, while being careful to exclude the mixture of lard solids and cottonseed oil for ointments, should at the same time not condemn a pure article.

APRIL EXAMINATIONS IN EDINBURGH.

At the April meeting of the Board of Examiners for Scotland the following passed:—

Major Examination.

Richardson, William, Liverpool.

Minor Examination.

Aitken, Robert, Manchester	Harrison, Thomas Blair, Edinburgh
Batty, Thomas Edward, Liverpool	Horner, Thomas William, Leeds
Beath, John, Edinburgh	Jones, Thomas Charles, Connah's Quay
Beattie, Peter Rattray, Edinburgh	Lewis, Harold, Manchester
Bentley, John Thomas, Keighley	Linley, Albert Ernest, Sheffield
Brackenbury, Walter Robert, Manchester	Macintosh, Robert, Edinburgh
Brooks, John William, Bolton	M'Vittie, David John, Edinburgh
Brown, Christian Charles, Sheffield	Munro, William Alexander, Edinburgh
Calvert, William David, Manchester	Nicholson, John Gordon, Edinburgh
Campbell, John Henry, Manchester	Parker, William, Manchester
Campsall, Arthur Wright, Rotherham	Pennington, John Richard, Worksop
Crichton, George, Glasgow	Roberts, Edward, Manchester
Davidson, Robert, Edinburgh	Robertson, Joseph, Edinburgh
Eaton, Robert, Clitheroe	Sloan, Charles Alexander, Edinburgh
Fernie, James, Edinburgh	Stringer, John Oswald, Bowdon
Fraser, Charles, Edinburgh	Thompson, John Cooke, Manchester
Freeland, John, Bathgate	Veitch, George Hutchison, Glasgow
Gordon, George, Edinburgh	Walker, John Dalling, North Berwick
Gordon, John Alexander, Edinburgh	
Gray, Charles Leith Hay, Edinburgh	

Business Changes.

MR. FORD, chemist, has purchased the business of Mr. J. W. Wood, chemist, of 130 Camden Road, N.W.

MR. W. ROBSON, chemist, has purchased the business of Mr. H. Edson, chemist, of Wightman Road, Hornsey, N.

MR. BROCKLEBANK, chemist, has purchased the business of Mr. Farmer, chemist, 106 High Street, Putney, S.W.

MESSRS. FRANCIS DAVIES & CO., chemists, have purchased the business of Mr. Gray, 93 Grosvenor Road, Highbury, N.

THE title of the Central Drug Company (Limited), of Newcastle, Staffordshire, has been changed by special resolution to Oxen & Co. (Limited).

MR. C. H. WINDSCHUEGL, late of the firm of Windschuegl, Hedley & Co., will carry on business in chemicals, oils, and drugs at Leadenhall Buildings, under the style of Charles Windschuegl & Co.

How to Advertise Liver-pills.—III.

ONE of the most "professional"-looking advertisements elicited by this competition is Mr. Clayton's, No. 53. It would fill a small space very effectively, and has the advantage of being illustrated without requiring blocks for the purpose, since the large and small circles used would be readily furnished forth by the case-room of any newspaper. No. 54 is wordy, but

display one's wit, but to sell one's goods, is sadly overlooked. No. 57 is made to look like a theatre advertisement. There is no reason why a person should read one kind of advertisement rather than another; therefore why not let the advertisement look like the kind it is? Once glanced at, however, it must be admitted this would probably be read through, and for



GIANTS
in those
DAYS.

quickly relieve and speedily cure Wind, Sick-headache, Costiveness, and all Bilious Disorders.

The "DWARF" LIVER-PILLS, price 1 1/2,
are sold only by
BLANK, CHEMIST, DULLTOWN.

(53) CHRISTOPHER CLAYTON, Oxford.



DWARFS
in these
DAYS.

"HAPPY is the nation which has no history!" says the essayist. "Happy is the man who has no Liver!" says the *fin-de-siècle* martyr to this much-abused organ. "No Liver?" Well, that statement requires qualification a bit. "Happy is the man whose Liver does its work so modestly and unobtrusively that he really does not know whether or not he possesses such a thing!"

HOW IS YOUR LIVER?

Does it perform its part in the human economy promptly and effectually, yet unconsciously to you; or are you troubled with nausea, sick-headache, a disagreeable taste in the mouth, and pains between the shoulders? Do you feel irritable, depressed, and easily worried? Then be sure your Liver is out of order, and you require a dose of

Blank's Hepatic Granules.

They are a safe, simple, and effectual remedy for all Liver-complaints, assisting digestion, acting gently on the bowels, and removing all effete matter from the system.

Sold in Vials, at 7d. and 1s. 1 1/2d. each, by the inventor,

N. O. BLANK,
THE DULLTOWN CHEMIST.
(54) "DICK."

The Pleasures of Life

would be more fully appreciated by thousands of persons if they could only shake off the low spirits and weariness that a sluggish liver inflicts.

BLANK'S LIVER-PILLS

quickly cure headache, indigestion, and bilious attacks. They contain no mercury, and may be taken by the most delicate with perfect safety.

Ask your chemist for them, or will be sent post-free from the Proprietor for

1s. 1 1/2d., 2s. 9d., or 4s. 6d.

BLANK, Chemist,
DULLTOWN.

(55) J. F. BLACKMORE,
Plymouth.

clever. No. 56 is also clever, without being unduly long, and displays the name of the pill in excellent style. The fact that the top line needs an apostrophe when read as part of the title, but cannot have one because it is made to read in

this reason we hesitate to condemn it altogether; but we doubt if it would sell pills all the same. No. 59, on the other hand, is a good selling advertisement, and looks more realistic—more like what a judicious country chemist would

BLANKS

are oftenest drawn in the lottery of life; few only secure the prizes, but all who suffer with a disorder

LIVER

may be sure of the prize of perfect health by taking one at bedtime occasionally of

BLANK'S LIVER

PILLS.

Sold in boxes, 1s. 1 1/2d. and 2s. 9d.

(56) W. K. TOMKINS,
Buckley.

BLANK, DISPENSING CHEMIST,
near the
ROYAL COURT THEATRE,
DULLTOWN.

To-day and following days,
"BLANK'S"
"Liver Relieving Granules."
Proprietor... J. BLANK.

THE FOLLOWING excellent qualities WILL APPEAR:—

To All..	Who Use Them,
Complete ..	Absence of All
Those ..	Disagreeable
Purging ..	Effects
Generally ..	Found in Most
Of the So-called	Infallible
Liver ..	Pills
And Being ..	Mild
In their Action	Complete
Safety ..	In Their
Use By ..	Females
And Delicate ..	Persons.

PRICES:—Boxes, 2s. 9d.
Small ditto, 1s. 1 1/2d.
Testimonials, Handbills, &c., FREE.
Doors Open, 8 A.M.
Carriages Attended to from
8 A.M. to 10 P.M.

(57) ARTHUR W. MURNA-
GHAN, West Derby, Liver-
pool.

PUBLIC WARNING!

It is reported by the detectives at Scotland Yard that there is a large number of ANARCHISTS AT LARGE. It is well known that the BOMBS used by them are capable of blowing up whole buildings, but there is nothing so effectual in removing all disorders of the LIVER, and curing kindred complaints, as

BLANK'S HEPAR LIVER PILLS.

YOU ARE THEREFORE WARNED to guard against all attacks of Biliousness and Indigestion by taking these pills on the first appearance of symptoms of these complaints.

In boxes at 1s. 1 1/2d. and 2s. 9d.

OF
BLANK, CHEMIST,
DULLTOWN.

(58) A. LILLY, Chiswick.

TO PRESERVE HEALTH IS TO PROLONG LIFE.

Both may be accomplished
BY THE OCCASIONAL USE
OF

BLANK'S LIVER PILLS.

When the Liver becomes sluggish from sedentary occupation, and various other causes, one or two pills taken at bedtime will restore its activity and enable it to better fulfil its most important function—THE PURIFICATION OF THE BLOOD.

Prepared only by

B. BLANK, CHEMIST, BLANKTON.
Price 1s. 1 1/2d. per box.

(59) J. COOPER, Worcester.

with the small type, also mars an otherwise excellent advertisement. Nos. 57 and 58 may be described as rather too clever; in both—but especially in the former—the trito maxim, already enumerated, that one advertises not to

be likely to insert in the local Press than a good many more prominent displays reproduced in this and past issues. In No. 66 the central figure stands for a facsimile of the package. It has the makings of a very good advertise-

ment indeed. No. 60 is smartly written, and so are Nos. 61, 62, and 63. There is "some fine confused feeling" in Nos. 64, 65, and 71. No. 64 has some of the advantages of an old advertisement by Mr. Holloway, mentioned with the first instalment of examples, and it would not improbably have taken a prize if it had not been handicapped by the acrostic, which damages the display, and is not, after all, a good acrostic either. No. 65 would

liver" was, no doubt, a capital headline when it was new; but it does not exhaust the subject. One correspondent, Mr. C. H. Whaley, an assistant in Manchester, writes a useful postcard of advice to Mr. Blank, which we publish, with the best of three examples forwarded separately. The conditions of the competition rule this out of order, since the excellent "advice" is plainly part of the scheme, and fills a card by itself; but Mr. Whaley's effort deserves

IF YOUR
LIVER
Is out of order, and you have
a
SHILLING IN YOUR POCKET,
GO TO
BLANK'S,
CHEMIST,
DULLTOWN,
And get a Box of his
"LIVERETTES."
THEY WILL PUT YOU RIGHT.

(60) CHARLES BELL,
Nunhead.

YOU ARE DYING
BY INCHES!
Your appetite is failing; there
is a nasty taste in the mouth;
you feel dull and listless, and
disinclined for any exertion.
Don't delay!
BLANK'S LIVER PILLS
WILL
give you new vigour, improve
the appetite, cleanse the
tongue, and
SAVE YOUR LIFE.
In boxes, 1s. and 2s. 6d.
Prepared and Sold only by
BLANK,
DISPENSING CHEMIST,
DULLTOWN-BY-SEA.

(61) H. E. EBBAGE,
Southend.

YOU
CANNOT
LIVE
long and disobey life's laws.
Take a chill, neglect it;
Keep late hours: You
know the result.
Eat too much: You soon
find it out.
Drink too much: other
people find that out.
Indulgences make you feel
Bilious. Liver wrong?
Yes. "May-Apple Pills"
will put you right for a
shilling.
BLANK, CHEMIST, DULLTOWN.
DEPOT FOR PUREST DRUGS.

(62) QUILP.

**ALL THE WORLD'S
A BLANK**
WHERE THERE ARE NO LIVERS,
BUT
BLANK'S LITTLE LIVERNERS
WILL DO WONDERS
FOR ALL THE LIVERS
IN THE WORLD,
If their owners would but try them.
JUST BUY A BOX
and note the effect, price 1/1½ & 2/9
Made only by
**J. BLANK, CHEMIST,
DULLTOWN.**
(63) P. SPARKS, Ipswich.

be a good advertisement if the "smart" portion ("Many know it; you didn't, did you?") had been left out. A little humour is a dangerous thing.

A good deal of "poetry"—by which is meant verse—came to hand, but most of it was bad. We limit ourselves now to quoting one specimen, No. 67, which was the best example on this line sent in. It cannot be called Tennysonian. Neverthe-

honourable mention. Even here, however, where the need of a good catchword is recognised, we do not get anything very striking. A really monumental advertisement would go outside "Marvellous for the liver," and suchlike phrases. What is wanted is something terse, pithy, and memorable. Judiciously used, a good headline may have in it the makings of a fortune; therefore such a thing is worth

1/1½ per Box.
BLANK'S PILLS OF HEALTH

FOR

BILIOUSNESS

LIVER COM-
PLAINTS

ACIDITY

NERVOUSNESS

KIDNEYS

SICKNESS

PAINS IN CHEST
AND BACK

ILLS OF EVERY
KIND

LANGUOR

LASSITUDE

SALLOW COM-
PLEXION

Why suffer bad health when such a
remedy is within your reach?

Try them, and make LIFE WORTH LIVING.

Prepared only by

BLANK, Chemist, Dulltown.

(64) O. KERSEY, Holland Park.

MANY KNOW IT!

1/1½ and 2/9

per box.

YOU DIDN'T! DID YOU?

BLANK, CHEMIST,

DULLTOWN,

Prepares "THE LIVER PILL" of the age.

HARMLESS

AND

EFFECTIVE.

TRY IT AND SEE.

(65) F. R. DE LISLE, Eastbourne.

BLANK'S SWEET LITTLE LIVER PILLS.

A PLEASANT, PALATABLE, POSITIVE
LIVER STIMULANT.

Will Cure
Will Cure
Will Cure
Will Cure
Will Cure
Will Cure
Will Cure
Will Cure
Will Cure
Will Cure



Biliousness
Headache
Constipation
Indigestion
Nervousness
Sleeplessness
Giddiness
Jaundice
Melancholia
Flatulence

7½d.

1/1½

OF ALL CHEMISTS.

Will not weaken, but will strengthen and
give increased vigour to the whole system.

FROM THE LABORATORY OF

BLANK, CHEMIST, DULL TOWN.

(66) ROBINSON, Hull.

less, there is a certain usefulness, as an occasional thing, in a versified advertisement, though one would not advise this sort of thing as a standing dish.

We do not find in this competition any strikingly original headlines or descriptive matter. It is noticeable how old catchwords turn up again and again, which shows that competitors recognise the value of a striking phrase. "Is life worth living? It depends on the

a little brain-racking. No one can give a recipe for the coining of golden phrases; but it is pretty safe to say that neither other people's advertisements nor the quotation dictionary will help.

To criticise the postcards submitted is an easier task than that of adjudicating on their comparative merits. We have a large number of postcards still unused, but after closely scrutinising them we do not find any among them

Stay, gentle reader, pause awhile, and heed
The poet's lines, to you addressed; and read,
Mark, inwardly digest, and you shall find
The secret of true happiness of mind.
Such happiness most closely is allied
To health of body. Nature side by side
Has placed them both, and sent forth her decree
That Health and Happiness twin sisters be.
Does life to you appear a dreary road?
Has care upon your shoulders cast its load?
Has sleep you pillow fled, and in its stead
Left you a throbbing brain and dizzy head?
Have those two orbs, that late so brightly shone,
Lost lustre? and has appetite, too, gone?
If 'tis so, gentle reader, in your case
Derangement of the liver I can trace.
BLANK'S LIVER-PILLS would you to health
restore;
Their action's prompt; the dose is two to four.

Sold in boxes at 7½d., 1s., and 2s. 3d. each.

(67) W. GRIFFITH,
Dalton-in-Furness.

MR. BLANK,

Be persuaded that your pills will lick
creation. They are as near perfection as pills
can be (elegantly put up; neat labels; not too
big, if a pill-tube is adopted).

Banish doubts, and firmly believe that you
are bound to succeed—nothing can prevent
you. Boon mustintingly. Register a suitable
name—a taking name, which shall be a house-
hold word—and stamp.

In the space at disposal, better confine your-
self to enteching phrases rather than cram it
with a lecture on anatomy or physiology in
small type.

A good idea will be to have also a special
sentence, which shall have a space in almost
every advertisement in addition to anything
else. They are liver-pills; then ever place
before the public what *you* are persuaded of,
and which shall persuade them in the end—
that they are

"MARVELLOUS FOR THE LIVER."

Example (in nicely-assorted type, leaving
half-inch margin):—

O, what a difference in the
morning!

When you have had a couple of

"**MOLECULES**"
THE NIGHT BEFORE.

They are simply

MARVELLOUS FOR THE LIVER.

(68) C. H. WHALEY, Manchester.

MR. BLANK,—

Advice as on first card.

Another example (spacing the same in
all):—

*They mayn't find a place in
every heart; but they are
certain to be offered a wel-
come spot in every stomach.*

"**MOLECULES**"

ARE SIMPLY

MARVELLOUS
FOR THE LIVER.

Prices and address.

(69) C. H. WHALEY, Manchester.

It is
necessary for a good man to be
a good liver;

but it is not at all neces-
sary for a good man,
or a bad man either,
to have a bad liver.

Unfor-
tunately, cases of biliousness,
headache, bad diges-
tion, jaundice, and
all the disagreeable
symptoms of a BAD
OR SLEGGISH LIVER
are far too common.

It can-
not be disputed that there
are medicines which
will dispense the
misery occasioned by
a sluggish liver, and
a better combination
of these medicines are
not to be met with
than

BLANK'S LIVER-PILLS.
They are honestly re-
commended by the
Proprietor for the
above complaints, &c.

(70) WILFRID HILL,
Coleshill.

LIFE may be worth
LIVING if the
LIVER is
DELIVERED of
its ailments. RELIEF
assured, RE-LIVE,
Turn over a new LEAF,
LEAVE a Shilling at
BLANK'S,

Receive a box of his
LIVER PILLS,
LIVEN A LIFE-LONG
Sluggish LIVER.
making LIFE a
thing of joy.

BLANK, CHEMIST,
BLANKTOWN.

(71) S. H. GOULD,
St. Leonard's.

border of mortars, it is considered, would be a distinc-
tive display for a chemist's advertisement.)

No. 47.—G. RAE, 265 High Street, Exeter, 5s. (For the
expression: "Never say die before using.")

No. 53.—CHRISTOPHER CLAYTON, 158 Cowley Road,
Oxford, 10s. (A good idea well expressed.)

No. 66.—T. W. ROBINSON, 8 Adelaide Terrace, Anlaby
Road, Hull, 10s. (An advertisement calculated to sell
the pills.)

Previous instalments of this competition will be found in
our issues of March 10 and March 24.

THE DRUGGIST'S CALENDAR.

READ at the February meeting of the Boston Druggists'
Association. By James F. Babcock. (From the *Druggists'*
Circular.)

New almanacs, the druggist man
Sends out to all in month of Jan.

In point of sales the lowest ebb
Is found each year in shortest Feb.

Now blust'ring winds the fixtures
jar,

And dust fills up the store in Mar.

Blood-medicines now are on the
tape,

For sars'parilla sells in Ap.

The flow'r-seed man next has his
say,

And sends commission goods in
May.

The root-beer fiend doth importune,
And starts his trade along in Jun.

The ice-cream soda thirst doth cool,
And flies abound in sunny Jul.

Look now for colic and mad-dog;
Jamaica ginger goes in Aug.

Gas-bills have late much higher
crept;

We light up earlier in Sept.

Front windows now are fully
stock'd

With lung-protectors bought in Oct.

The porter next puts up the stove,
And awnings down in gloomy Nov.

Receipts from trade somewhat in-
crease

From Christmas sales in wintry Dec.

Thus ev'ry month hath something
new

For druggists' busy hands to do.

Continued change the seasons fill,
But no change comes to druggist's
till.

The reason's plain—'tis very clear—
The cutter's with us all the year.

which would justify us in extending this report any further.
We, therefore, close it here.

We have gone over the whole competition with one
of the cleverest advertising experts in London by our
side, and have taken his opinion as we went along. It
was found impossible to fix upon any advertisement of such
marked merit as to say, without doubt, that it stood clear
above the rest; but we have marked the following for
awards:—

No. 1.—J. VERNON MITCHELL, Culworth Street, Lon-
don, 5s. (Effective display.)

No. 4.—D. MACDOUGALL, 4 Church Street, Inverness, 10s.
(Expressly for the phrase: "Once used, seldom
used").

Nos. 19 and 85.—H. B. SHARMAN, 15 Old Bond Street,
Bath, 10s. (For attractiveness of style.)

Nos. 22, 23, and 25.—A. A. KNIGHT, Allerton, Bradford, 5s.
(For general effect.)

No. 32.—A. W. NUNN, 9 The Parade, Lower Sydenham, 5s.
(For the key idea.)

No. 36.—J. S. LIVERSIDGE ("Wormeake"), c/o Mr. McLeod,
18 Brandon Terrace, Edinburgh, 10s. (The half

MR. WILLIAM GARDNER, of Gloucester, is exhibiting his
sifters and mixers at the Bingley Hall Exhibition, Birming-
ham, where they can be inspected.



Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., April 19.

The New Spirit Duties.

The increased spirit duties proposed by the Chancellor of the Exchequer in his Budget Bill came in force on Tuesday. Should the Bill fail to pass and the duty remain unchanged, any excess paid will be returned by the Government. The following resolution was adopted by the House of Commons on Monday night, and went into immediate effect:—That in addition to the duties of Customs now payable on spirits, there shall be charged and paid the duties following (that is to say):—

	£	s.	d.
For every gallon computed at proof of spirits of any description except perfumed spirits	0	0	6
For every gallon of perfumed spirits	0	0	10
For every gallon of liqueurs, cordials, mixtures, and other preparations entered in such a manner as to indicate that the strength is not to be tested ..	0	0	8

And the duties of Customs on the articles hereinafter mentioned, being articles of which spirits are a part or ingredient, shall be proportionately increased, and shall be as follows:—

	£	s.	d.
Chloral hydrate the pound	0	1	4
Chloroform "	0	3	3
Collodion the gallon	1	6	3
Ether acetic the pound	0	1	11
Ether butyric the gallon	0	16	5
Ether sulphuric "	1	7	5
Ethyl iodide of "	0	14	3

The Excise duty on spirits distilled in the United Kingdom is increased by a separate resolution.

The advance on chloral hydrate and acetic ether amounts to 1d. per lb., on chloroform to 2d. per lb., on iodide of ethyl to 8d. per gallon, on butyric ether to 9d. per gallon, and on sulphuric ether and collodion to 1s. 3d. per gallon.

The London Cinchona-sales.

Owing to the intervention of the Whitsun holidays, there will be no cinchona-auctions in London between May 1 and May 29 next.

The Liverpool Market.

Our Liverpool correspondent, writing on April 17, says that the last arrival of *Chilian anise* was only 8 bags, and the value of 28s. per cwt. is well maintained for good seed. *Calabar beans* have lost the interest they lately possessed, and 30 bags have been sold at 2d. per lb., ex quay. *African ginger* has experienced a further advance, a considerable quantity having changed hands at 37s. per cwt. *Castor oil*: Notwithstanding the arrival of 2,500 cases good seconds by the *Dictator*, the market shows a much firmer tendency, and there are no sellers ex quay, under 2½d., to 2¾d. per lb., ex store. *Gum acacia*: The demand continues quiet for *Soudan*; inquiries are chiefly for the finer grades, the stock of which is now a very small compass. Holders of the ordinary types of gum are steady. *Canary seed* maintains the advance, and 41s. 6d. per qr. is asked for good bright

seed. *Guinea grains*: The quay has again been cleared, and holders ask 25s. per cwt. for new crop.

The New York Drug Market.

The drug trade continues quiet throughout. The few articles the prices of which have changed because of changes in the condition of the supply monopolise the attention of the traders, though even in these lines no very active purchasing is going on. But little interest attaches to American drugs as a rule, though there are some exceptions. *Texan snake-root* has been inquired for, and is very stiff at an advance to 35c. in jobbing quantities. News from California of damage done to the growing mustard crop, in consequence of drought, caused a marked improvement in the position of Californian yellow mustard seed, 3¾c. to 4c. being asked. *Cascarilla* is very scarce at the moment, and is offered sparingly at 7c. *Jatorandi leaves* may be had at 19c., though in some quarters a higher figure is wanted. *Mexican saffron* (sailflower) is under very firm control, and has been advanced to 48c. to 50c. *Balsam Peru* has advanced to \$1.65 to \$1.70, and is very firm at that. *Damiana leaves* are now quoted at 12½c. and are firm at the advance. A subsequent letter, dated April 10, states that *Aloes* (*Curacao*) is more active, and sales reported at 2½c. to 2¾c. For additional quantities the outside figure is required. *Ammonia muriate*, white grain, continues firm at 6½c. to 6¾c.; and grey, 6¼c. *Arsenic* is quiet, and prices easier at 3½c. to 3¾c. The *Massasoit*, from Bristol, brought 2,000 barrels. *Annatto seed* in good demand, and prices firmly maintained at 4½d. to 4¾d. for prime Jamaica. Imports for the week aggregate 175 barrels. *Asafetida*: Prices are easing off. Prime *Calcutta* is offered at 22c. to 24c., and some inferior grades are selling down to 14c. *Balsam copaiba*: The demand is moderately active, with former figures retained. Central American, 32c.; Para, 37c.; Angostura, 42c. to 44c. Supplies are keeping pace with the demand. Per *Amazonense*, from Para, about 6,000 lbs. were received, and the *Caracas*, from Curacao, had about 500 lbs. *Balsam fir* (*Canada*) is pressing for sale at \$3.30 per gallon. Offerings are not large, but prices are easy on account of the light demand. *Balsam fir* (*Oregon*) is coming more into favour among druggists; some uncut arrivals have been offering at 65c. to 70c. per gallon in barrels. *Balsam tolu* continues dull and uninteresting, buyers showing no disposition to make purchases in anticipation of a lower market during the next sixty days. From importers' hands it is obtainable at 22c. to 22½c. *Cascara sagrada* is in moderate request at steady and unchanged prices; prime thin, 5c. to 5¼c.; thick bark is offered at 4¾c. *Quillaia* does not improve in value, and prices show a slight decline, quoted at 1½c. to 3½c. for whole and 3¾c. to 4c. for ground. *Castoreum* offerings are rather urgent and prices weak. One lot of about 20 lbs. has been seeking buyers at \$18; holders generally ask \$19 to \$20. *Chloride of lime*: The demand is slow and market weak under large supplies. French, \$1.90 100 lbs.; English, 2½c. to 2¾c. *Cloves* are in liberal supply, with prices easier and trade inactive, quoted at 5½c. to 5¾c. About 2,500 bales arrived at this port within two weeks. *Gum-chicle*: The steady accumulation of stocks has produced an easier tendency. Bids of 22c. have been solicited. *Coca-leaves* receive more attention. Prices are slightly firmer, at 14½c. to 15½c. for Truxillo, and 25c. to 27c. for Huanoco. *Menthol* is easier again, and some has been offered at \$4 in a jobbing way; \$4.50 is quoted. *Oil cod-liver* (*Norwegian*): Holders appear to have gained more confidence, and there is less disposition to release round lots. Advises from abroad continue to be of an unfavourable character. Limited quantities are yet to be had at \$27, though that is now the inside price. *Oil* (*cotton-seed*) shows a firmer tendency, and prices for some grades may be quoted a trifle higher. Prime summer yellow is held at 33c., and for winter yellow 35c. is asked, and winter white 36c. The firm position of the article would indicate a rise of values shortly. *Oil* (*peppermint*): There is more demand for export, and the market is sustained upon a steadier basis. H.G.H. is quoted at \$2.75, though \$2.70 would yet buy. Western, in cans, \$2.25; and Wayne Co., in cans, \$2.35. *Oil* (*wintergreen*) is somewhat lower, supplies being offered with more freedom. Prime quality, \$1.30 to \$1.35. *Oxalic acid* is exceptionally dull, and with the accumulation of stocks, due to lack of demand, prices have

receded a fraction, 6 $\frac{3}{4}$ c. being now named for goods ex dock. *Opium* continues dull, and prices are depressed; jobbing orders are small and unimportant, there being little disposition to make purchases in the present unsettled condition of the market. On spot stocks are offered at \$2.45, and to arrive orders are solicited at \$2.40, with intimations that an offer of \$2.35 might be considered. The large arrivals at New York and Philadelphia ports since January 1 are used as a bear argument by some in the trade. It may, however, be said a large portion of the Philadelphia stock went into the hands of manufacturers, purchases having been made in anticipation of the probable imposition of \$1. per lb. duty, and there is very little of it offering at present prices. *Potash first sorts* is rather easier at 3 $\frac{1}{2}$ c. to 4c. *Pearlash* is lower at 5 $\frac{1}{2}$ c. to 5 $\frac{1}{4}$ c. *Potash Bichromate* declined to 9 $\frac{1}{4}$ d., due to a lack of harmony among foreign and American manufacturers. *Potash Prussiate* is weak, and with a view of stimulating buyers second-hands are quoting at 21 $\frac{1}{2}$ c. to 22c. *Potash Chlorate*: the demand continues light, and supplies are offered at a slight concession: German crystals 13 $\frac{1}{2}$ c., English crystals 14c., powder $\frac{1}{2}$ c. higher. *Quinine*, after a period of inactivity, became prominent again, offers to sell round lots last week at 22c. being followed by an easing off in prices for jobbing quantities, and to-day 22 $\frac{3}{4}$ c. to 23c. is named for case lots; manufacturers' prices are unaltered on the basis 25c. for bulk. The present weakness is attributed to a desire on the part of some holders who purchased previous to the last advance to dispose of their surplus stock. *Goldenseal root*: from the West supplies are offered at 20c., on spot 21c. is quoted. *Jalap*, the liberal arrivals and consequent accumulation of stocks have caused a further weakening in values; some transactions are reported at 20c., though that price has been refused by some holders. *Serpentaria*: the available supplies in the West are reported small, St. Louis being the only point from which stocks are offered; holders here are endeavouring to get 35c. though supplies can readily be obtained at 32c. *Mexican Sarsaparilla*: about 100 bales arrived from Tampico and Greytown. Importers are disposed to make concessions; 8c. is quoted; buyers' views are not quite up to that figure.

The Hamburg Market.

Business is still dull here (writes our correspondent, under date of April 17); there is little moving in the drug-trade, and the scarcity of money is felt, the bank-discount last week being 3 per cent. The *Carmarthenshire* has brought us from Cochin and Tellicherry 65 cases cardamoms, from Japan 500 cases camphor; and the *Agalaia*, from Japan, 2,000 cases fish-oil. The following prices are quoted:—*Balsam Peru*, at 7s. 6d. to 7s. 7 $\frac{1}{2}$ d. per lb. Price is expected to rise further, as there is no prospect of new and good quality of balsam being brought to the market. Cheap, and in consequence inferior, quality is still to be had. *Acid Boracic*, pure powder, at 38s. 6d. per cwt., and *Borax in crystals*, 31s. to 32s. 6d. per cwt. Prices are expected to fall. There is at present very great competition among makers, but the Union is holding out. It is not advisable to buy for future delivery, as there will certainly be an alteration in the price. *Castoreum (Canadian)*: Nothing of any importance has arrived, and prices for American castor are still steady, but there has been some demand for Russian castor, which proves the scarcity of the article, and it is well to keep stock back. *Cod-liver oil* (old), at 60s. per original cask. This oil is expected to rise very much in price, as the supply is short; the catch has been a failure, and it is well to be provided for an emergency. *Cevadilla* is quoted to-day at 81s. 3d. per cwt. By buying a larger quantity a small reduction would be made, but it is not advisable to buy for future delivery. *Sarsaparilla Honduras*, 1s. 6 $\frac{1}{2}$ d. to 2s. 3d. per lb. Prices are low for good quality root, and are not expected to fall farther. *Spirit* (V.S. 96 per cent.), at 18s. 9d. for 100 litres basis 100 per cent. Price is very low at present, and there is very little doubt but that the season will close with an average price, unless, as it is rumoured, a new tax is to be put on alcohol here.

Telegram from New York.

Our American correspondent, telegraphing on Wednesday night, informs us that there has been a further advance in *American Oil of peppermint* (H.G.H.), which is now quoted there at \$2.85. The market is still tending higher. *Senega-*

root remains firm at 40c. per lb., shipments of 2,000 lbs. of this root being made to London in the course of this week. *Mexican sarsaparilla* is offering at the reduced rate of 8 $\frac{1}{2}$ c. per lb.

Smyrna Opium Telegram.

Our correspondent telegraphs on Wednesday night that purchases of opium for American account have again commenced, holders having made a considerable concession. 30 cases of fair current manufacturing opium changed hands at the equivalent of 9s. 4d. per lb., f.o.b., which shows a drop of 1s., compared with the closing price on March 30.

The Canadian Tariff.

The new Tariff Bill proposed by the Canadian Government is still being debated at Ottawa, but the rates of duty specified in it came into operation immediately upon the submission of the Bill, and differences in the matter of over- or under-charges will be arranged between the Customs and the importers when the Bill becomes law. In this respect Canada differs from the United States and from nearly all continental countries, where the dates upon which new duties will come into effect are announced beforehand, greatly to the disturbance of the trade. The following are the principal changes in the duties on pharmaceutical goods:—Sulphuric acid has been reduced from $\frac{1}{2}$ c. to $\frac{4}{10}$ c. per lb.; acetic acid, imported for colour-making or dyeing, from 20 per cent. and 25c. per gallon to 25 per cent. *ad val.* Acids other than muriatic, nitric, sulphuric, pyroligneous, and acetic, and employed for medicinal, chemical, or manufacturing purposes, are on the free list. They formerly paid 20 per cent. Acid phosphate now pays 2c. instead of 3c. per lb. Essential oils have been reduced from 20 per cent. to 10 per cent. Salad oil has been increased from 20 per cent. to 30 per cent., but olive oil is free. Paints, colours, ochres, and oxides have been reduced from 30 per cent. to 25 per cent. Varnishes are now 20 per cent. and 20c. per gallon, against 25 per cent. and 20c. per gallon. Blacking for shoes or harness, leather dressing, and harness soaps, are now 25 instead of 30 per cent. Liquorice-paste formerly paid 2c. per lb., and sticks 3c. per lb.; both are now included at 20 per cent. Carbolic oil, formerly rated at 10 per cent., is now free, as also tin crystals, which formerly paid 20 per cent. Red and yellow prussiate of potash, formerly 10 per cent., are now on the free list. Saltpetre, previously at 20 per cent.; lamp-black, at 10 per cent.; lead acetate and nitrate, and zinc sulphate, and other zinc salts, at 5 per cent., have all been put on the free list, as well as caustic soda in packages smaller than the ordinary drums. Crude lime-juice is free, as formerly, and, if fortified with spirit, also pays the old duty; but unsweetened juice, which was chargeable with 10c. per gallon, and sweetened with 40c. per gallon, are now to pay an *ad val.* rate of 20 per cent. The duty on spirits and alcoholic compounds has not been changed.

Powdered opium was not previously separately enumerated, and was sometimes imported as a drug, thus paying 20 per cent., or, if brought in as opium, was subject to the charge of \$1 per lb. The rate is now fixed at \$1.35 per lb. Beeswax has dropped from 20 to 10 cent., and paraffin wax has been reduced from 3c. to 2c. per lb. Laundry-soap, unperfumed, is now 1c. instead of 1 $\frac{1}{2}$ c. per lb., and perfumed soaps, with pearline, soap-powders, silver and pumice soaps, which formerly paid 10 per cent. and 10c. per lb., now stand at an *ad val.* rate of 35 per cent. Glue and mucilage have been reduced from 30 per cent. and 3c. per lb. to 25 per cent. straight. British gum, dextrine, and sizing, which paid 1c. per lb., are now subject to 10 per cent. only. Surgical instruments of all kinds have dropped from 20 to 15 per cent. The specific duty of 5c. per dozen has been taken off glass jars, which, however, still bear, with other glassware, the *ad val.* duty of 30 per cent. Demijohns have been reduced from 3c. to 2c. per gallon capacity.

Paper bags have been reduced from 35 to 25 per cent. All medicinal preparations, including patent or proprietary preparations, and all chemical or pharmaceutical preparations or medicines, if liquid, will pay 50 per cent. *ad val.*; if not liquid, 25 per cent. *ad val.*; medicated cod-liver oil, 20 per cent.; essential oils, 10 per cent.; French pomades in tins, if not less than 10 lbs. each, 15 per cent.; non-alcoholic perfumery and toilet preparations used for the

hair, mouth, or skin, 30 per cent.; paraffin-candles, 4c. per lb.; lubricating-oils and axle-grease, 25 per cent.; writing-ink, 20 per cent.; blue, 25 per cent.; dry white, red-lead, orange mineral, and zinc white, 5 per cent.; ochres, siennas, and dry colours, 20 per cent.; rough paints and colours, 25 per cent.; paints and colours ground in spirits and all spirit-varnishes and lacquers, \$1.00 per gallon; varnishes, lacquers, liquid dryers, and finish, 20c. per gallon and 20 per cent.; dry Paris green, 10 per cent.; magic-lanterns and slides, optical, philosophical, photographic, and mathematical instruments, 25 per cent.; spectacles, 30 per cent.; spectacle-frames, 20 per cent.

Baron v. Rosenberg on Ceylon Cinchona.

Baron von Rosenberg of Travancore, whose occasional contributions to THE CHEMIST AND DRUGGIST on cinchona cultivation have attracted a good deal of attention among persons interested in that drug, has been paying a visit to Ceylon, and on that occasion was interviewed by the *Times of Ceylon* on his favourite subject. The Baron still thinks that cinchona would do well in Ceylon if properly worked, and he confidently expects that in time to come the bark will again become a leading export article from the island. Baron von Rosenberg told the *Times* representative that he is now the only cinchona grower in Travancore. He does not grow *Ledgeriana* or *Succirubra*. "My cinchona," he remarked, "is all *Condaminea*, and it grows best above 5,000 feet, and would, I am sure, grow well in Ceylon at similar elevations." Fresh from his interview with the visitor from Travancore, the *Times of Ceylon* man went to Mr. Charles Böhringer, a well-known cinchona buyer in Colombo, who admitted that cinchona, if taken up again by Ceylon planters, would pay, and who agreed with the Baron that the best results were obtainable above 4,500 feet, and from hybrid cinchona. Mr. Böhringer also thought that the Ceylon method of taking the bark from the tree by shaving it lightly, instead of by cutting right into the wood of the tree (which is the method Baron Rosenberg favours), was the proper one to pursue. The idea that an arrangement could have been come to between Java and Ceylon as to the regulation of shipments had always been, he said, the Baron's favourite madness, but it was one that had exploded long ago.

ACID (CARBOLIC).—A firm market. On the spot there is very little business doing, but it is said that a fair amount of orders are passing for delivery. *Crystals* are quoted at 6½d. per lb. for 39° to 40°, and 5½d. for 34° to 35°. Liquid 95 to 98 per cent. is offering at 1s. 6d., and might perhaps be had at 1s. 5d. per gallon; but one firm, at least, are asking 1s. 8d. Crude 60-per cent, at 1s. 7d.; 75-per-cent., at 1s. 10½d. per gallon.

ACID (CITRIC).—Dull, at 1s. 3¾d. per lb.

ACID (TARTARIC).—*English* is quoted at 10¾d. to 11d. per lb., according to brand. *Foreign crystals* or *powder* at 10¾d. per lb.

ALCOHOL.—Quiet. Fair to good quality of German potato-spirit is now offering in bond at from 7½d. to 8½d. per proof-gallon, c.i.f. terms, without packing. The duty is therefore at present about seventeen times the actual cost of the commodity. In Germany it is equal to about 2s. per gallon, or three times the price of the article.

ALOE.—At auction on Friday last, 48 cases *Cape aloes* sold at 22s. per cwt. for good bright hard, 21s. 6d. for good bright, slightly soft mixed, and 18s. for burnt and dull quality. This shows a somewhat better market.

AMBERGRIS continues to sell freely, at low rates. About 22 oz. of Australian sold at 85s. per oz. for good greyish of good flavour, 54s. for fair brown, and 30s. per cwt. for dull "undeveloped" of soapy flavour.

ANISE.—A firm market with very little offering: common stony to good bright *Russian* seed realises from 26s. to 31s.; fair to good *Italian*, from 33s. to 36s. per cwt.

ARARоба.—We are informed that the parcel of araroba, which was bought in at last Thursday's drug-auctions, had never before been offered for sale here, either publicly or privately.

BALSAM PERU.—A very firm market at 7s. 6d. per lb. for good quality, which is very scarce. Business at 7s. per lb., landed terms, for arrival, was reported a few days ago.

BENZON remains neglected. At the continuation of the drug-sales on Friday last, 8 cases *Siam* gum, small seed in block, were bought in at 80s. per cwt., and of another lot of *Siam* gum 6 cases sold at 87. 15s. to 87. 17s. 6d. per cwt. for small to medium almond block of fair colour, partly free. Several parcels of *Sumatra* seconds were bought in at nominal rates.

BUCHU.—A parcel of 11 bales fair round yellowish buchu-leaves sold cheaply on Friday last, at 3d. per lb. for the lot.

CAMPHOR (CRUDE).—A steady market. Lots afloat and shortly due are inquired for, and have been sold at 94s. per cwt., c.i.f., for Japan, and 77s. 6d. per cwt., c.i.f., for China. Distant-shipment China has realised 75s., c.i.f.; Japan, May-June, 93s., c.i.f. On the spot, 80s. per cwt. has been paid for China camphor. In Hong-Kong, on March 15, the camphor-market closed weak, at \$43 per picul for Japan (nominally), and at \$40 for Formosa, of which there was an unsold stock of about 1,200 boxes.

CASCARA SAGRADA.—Forty bags of fair quality from San Francisco were bought in at 28s. per cwt. on Friday last.

CASSIA FISTULA.—From Amsterdam a strong market is reported. There have been a good many re-sales of second-hand parcels, and there are buyers (but apparently no sellers) for delivery, at about 9.50 florins (15s. 9d.), "quality guaranteed."

CHLORATE OF POTASH is easier, spot stuff being now offered at 7d. per lb., and forward delivery at the same price.

CINCHONA.—At the cinchona-auctions on Tuesday a very moderate supply was offered. It was made up as follows:—

	Packages	Packages
	317 of which	224 were sold
Ceylon cinchona	762	473
East Indian cinchona	70	70
Javan cinchona	73	73
South American cinchona	73	73
	1,222	840

The sales passed off very quietly, without any quotable change in price on the last auctions. The bulk of the bark offered consisted of fair East Indian *Officinalis*, but a considerable portion was bought in. The unit remains as nearly as possible ½d. per lb. The following figures represent the quantities purchased by the principal buyers:—

	Lbs.
Agents for the Mannheim and Amsterdam works	69,593
Agents for the Brunswick factory	50,864
Agents for the American and Italian works	35,808
Messrs. Howards & Sons	28,270
Agents for the Auerbach factory	16,520
Agents for the Frankfort-on-the-Main and Stuttgart works	9,900
Druggists and others	16,800
Total quantity of bark sold	227,760
Bought in or withdrawn	107,398
Total quantity offered	335,158

It should be remembered that the proportion of bark bought by a buyer is no indication of the percentage of the total amount of quinine in the sales represented by his purchases.

The following prices were paid for sound bark:—

CEYLON CINCHONA.—*Original*: Ordinary woody to fair bright quilly red branch and stem chips and shavings, 1½d. to 1¾d.; low ditto, ¾d. per lb.; yellow stem chips, 3½d. per lb. Hybrid chips, 1¾d. per lb. *Renewed*: Ordinary to fair red stem and branch chips and shavings, 1d. to 1¾d. per lb. Hybrid stem chips, 2d. per lb.

EAST INDIAN CINCHONA.—*Original*: Red varieties:—Ordinary to good bright quilly stem and branch chips, 1½d. to 2¾d.; fair broken quill, 2¾d.; dusty root, 1½d. to 1¾d. per lb. Grey varieties:—Ordinary to good bright quilly chips, 2¼d. to 3¾d.; good root, 4¼d. per lb. Yellow:—Fair to good branch chips, 2½d. to 5¾d. (one lot, said to contain the equivalent of 5.27 per cent., s.g., sold at 4¼d. per lb.); fair stem chips, 2¾d. to 3d.; one lot, said to contain 6.53 per cent., s.g., 5¾d. per lb. Hybrid chips and shavings, 3¾d. per lb. *Renewed*: Red chips, 1½d. to 2½d.; good bright stem and branch chips, 3½d. to 5¼d.; broken quill, 4¾d. to 5½d. per lb. Yellow chips, 2¼d. per lb.

JAVAN CINCHONA.—Yellow branch, rather dusty, 3*d.* to 3½*d.* per lb.

SOUTH AMERICAN CINCHONA.—Seventy-three bales cultivated *Bolivian* Calisaya quill realised from 4*d.* per lb. for dull broken to 5½*d.* per lb. for fair, partly thin quill.

COCAINE.—After a couple of months' quietness, the price of *cocaine hydrochlorate* was suddenly reduced on Wednesday to 18*s.* per oz. for 100-oz. parcels, 18*s.* 3*d.* for lots of from 25 to 100-oz., and 18*s.* 6*d.* per oz. for smaller quantities. The reduction, which is at the rate of 1*s.* per oz., applies to all the "competing brands."

CORIANDER.—The demand still continues, and prices are rising steadily; there is very little stock left, and for English seed from 26*s.* to 30*s.* per cwt., according to quality, is asked. Ordinary qualities for grinding are offering at from 20*s.* to 22*s.*

CREAM OF TARTAR.—Best white *French crystals* are being offered here at 62*s.* 6*d.*, *German powder* at 65*s.* per cwt.

CUMIN-SEED.—There has been more inquiry lately, especially for *Malta* seed for export; the price of this variety ranges from 35*s.* to 40*s.* according to quality. *Italian* is quoted at 34*s.* to 35*s.* The stock of *Moroccan* seed is held by a few speculators, who hold it at high prices—good quality at 30*s.* to 31*s.* per cwt.

DRAGON'S-BLOOD.—Four cases seedy lump from Singapore, fair fiery colour, sold last Friday at 7*l.* 12*s.* 6*d.* per cwt.

ERGOT OF RYE remains very neglected. A parcel of six cases fair sound *Spanish* ergot was bought in on Friday last at 1*s.* 1*d.* per lb.; but probably 11*d.* per lb. would buy it. For another parcel (49 balcs) of fair sound Spanish 1*s.* per lb. is wanted.

GALLS (CHINA).—The market to arrive is firmer, and nothing is offering below 42*s.*, c.i.f. terms.

GAMBOGE.—A new parcel of 34 cases, recently imported from Singapore, was mostly disposed of last Friday at 11*l.* to 11*l.* 10*s.* per cwt. for good slightly run pipe, 9*l.* 12*s.* 6*d.* for broken blocky pipe of ricey fracture, 9*l.* for common drossy broken gum, and 8*l.* 12*s.* 6*d.* per cwt. for common pickings. The exports of gamboge from Saigon in 1893 amounted to 1,395 piculs, valued at 11,375*l.*

GINGER continues to advance. Early this week washed rough *Cochin* sold privately at 57*s.* 6*d.* per cwt., and at auction 130 cases were partly disposed of at an advance of from 5*s.* to 7*s.* 6*d.* per cwt. on the previous sales. Good to fine bold cut brought 75*s.* to 80*s.*; fine bright, bold C cut, 65*s.* per cwt. Of about 600 bags the greater part sold at 45*s.* to 50*s.* for cuttings and rough ends, and 58*s.* per cwt. for fair washed rough. About 500 packages *Jamaica* sold at an advance of from 1*s.* to 3*s.*: Ratoon, 62*s.*; common dark and rough lean, 64*s.* to 66*s.*; ordinary dull, lean, 67*s.* to 69*s.*; medium dull, washed, 70*s.* 6*d.* to 73*s.* 6*d.*; medium, 76*s.* to 77*s.* 6*d.* Lined *Japan* brought 44*s.* per cwt. Of *African* ginger 600 bags sold at 37*s.* 6*d.* to 38*s.* per cwt. in Liverpool.

GUM ACACIA.—There is next to nothing doing in *Soudan* sorts, which are quoted, according to quality, from 37*s.* 6*d.* for hard amber up to 52*s.* 6*d.* for fine pale soft. *Gezirah* gum is scarce, the nominal price being 35*s.* per cwt.; while *Talea*, of which no stock appears to be in London at present, offers at from 30*s.* to 33*s.* *Persian* gum (insoluble) remains quiet, with large stocks. At auction to-day 40 packages *Soudan* sorts sold steadily, at 41*s.* for fair, and 53*s.* for good pale. Of 40 bags *Australian* gum a small portion sold, at 19*s.* for blocky, and 21*s.* for good pale dusty.

GUM AMMONIACUM.—Four cases from Bombay realised 45*s.* per cwt. last Friday for fair slightly blocky drop partly pale yellow, partly dark and seedy mixed, and 30*s.* per cwt. for dark and blocky ditto.

GUM TRAGACANTH.—Good and medium qualities are active, at firm prices—seconds *Bagdad*, at from 10*l.* 15*s.* to 12*l.*; thirds, at 9*l.* 10*s.* to 10*l.* 15*s.*; fourths, at from 7*l.* 10*s.* to 9*l.* 5*s.* per cwt. *Hog* gum is selling at 90*s.* for fair quality; but there is not much demand for fine fair seconds. *Smyrna* seconds have sold at 11*l.* per cwt.; for firsts, 13*l.* to 14*l.* is asked; the stock is small, and the inquiry fairly good.

INSECT-POWDER.—A four-keg parcel from Trieste sold on Friday last, subject to approval, at 4½*d.* per lb.

IODINE.—The 12 kegs to which we referred in our last report were offered for sale on Friday last and bought in after all. For the first lot, containing 56.83 per cent. of iodine, 31½*d.* per oz. was offered, and the broker, amid laughter, bought it, and all the others, in at 9*d.* per oz. As this is the price at which good commercial iodine may be had from the convention, the offering for sale of this low-class parcel can hardly have been meant seriously. On the day of the sale of the parcel, the representative of the Scotch house connected with the convention was here and very likely no more will be heard of the lot.

JALAP.—In 1893, 103 tons of jalap, of an estimated value of 6,257*l.*, were exported from Vera Cruz. Of this quantity 11 tons, worth 547*l.*, went to the United Kingdom; 33 tons, worth 2,586*l.*, to Germany; 8 tons, worth 200*l.*, to France; and 51 tons, worth 2,923*l.*, to the United States.

KOUSSO.—Fine flowers in rolls remain exceedingly scarce. Two bales dull dark loose koussou offered last Friday were bought in at 8*d.* per lb. A penny less would probably be accepted.

MENTHOL shows some slight signs of recovery from its recent depression in price. At the end of last week the quotation marked as low as 13*s.* 6*d.* per lb., but to-day 14*s.* per lb. is the lowest spot price. For shipment (April–May) 12*s.* 6*d.* per lb., c.i.f., is asked. It is reported that the market is cleared in Japan, and that there is very little indeed to be had in Hamburg.

MYRRH.—Of 30 packages of recent import about 22 bales and cases were sold at 65*s.* for bold palish chips, 50*s.* for fair siftings, and 43*s.* per cwt. for ordinary pickings. A damaged parcel realised from 92*s.* 6*d.* to 102*s.* 6*d.* for fair Aden picked, partly glassy and slightly blocky; 57*s.* 6*d.* to 60*s.* for fair siftings; and 35*s.* to 37*s.* per cwt. for fair pickings.

NUX VOMICA.—Out of a parcel of 224 bags from *Cochin* offered last Friday, 40 sold at 9*s.* 6*d.* per cwt. for small bright pale silky fruit. The imports continue to be fairly heavy.

OIL (CASTOR).—Fourpence per lb. was paid for a small lot of fine pale Italian castor oil on Friday last. Calcutta seconds are offering at 1½*d.* per lb., c.i.f., to arrive.

OIL (COD-LIVER).—The position remains unchanged. The "bull" party continue to ask high prices—the lowest figure quoted by any of them for new non-congealing Lofoten oil being 110*s.* per barrel—but they cannot sell anything so long as two or three houses continue to suggest that much lower prices would be acceptable. One of these, we believe, state that they are prepared to wire out an offer at 90*s.* per barrel, c.i.f. terms.

OILS (ESSENTIAL).—American oil of *peppermint* (HGH) is quoted at 12*s.* 4½*d.* per lb. in London. That is probably the lowest price at which it would be possible to buy. In the States the quotation is said to be equal to 13*s.* 6*d.* per lb., *Star anise* oil is reported higher, 6*s.* per lb. is said to have been paid, and holders now generally ask 6*s.* 1*d.* and even 6*s.* 2*d.* per lb. *Oil of lemon* is reported slightly dearer from Sicily, and sales are said to have been made this week at the rate of 3*s.* 1*d.* per lb. for "super" quality. *Oil of cassia* remains dull at 3*s.* 4*d.* per lb. on the spot, and 3*s.* c.i.f. terms.

OPIMUM.—In the London market scarcely any business is reported this week, but it is said to-day that telegrams from Smyrna announce a rise up to 9*s.* 6*d.* per lb. for fair manufacturing. The prices here have not so far responded to this increase, and are quoted as follows:—Good to fine soft shipping, 12*s.* to 12*s.* 6*d.*; ditto Smyrna, 11*s.* 6*d.* to 12*s.*; druggists' seconds, 10*s.* 6*d.* to 11*s.*; ordinary to fine Constantinople, 10*s.* 6*d.* to 12*s.*; Persian, 10*s.* to 11*s.* 9*d.* per lb.; and fine soft shipping is scarce and firmly held. The Smyrna correspondent, whose reports have all along been of different tenor to those of our regular contributors in that city and in Constantinople, replies as follows to the attacks made upon him in the report from the Turkish capital, which we printed on page 432 of

our issue of March 24:—"Your correspondent in Constantinople accuses me of bearing the market, and of incompetence with regard to the article I report about. Let me tell this gentleman that when one has been trading in a drug for nearly half a century (as I have done) one knows a little more about it than a man whose experience only extends over a few years. His reports of the coming crop, collected from villagers and peasants, are ridiculous. He already estimates it at 4,500 to 5,000 baskets, and says that it may go to 5,700. Then he goes on to estimate the damage at 25 to 65 per cent. Now, it is much too early in the season to speak so categorically; and the person whom your correspondent has sent on tour through the growing districts must be as inexperienced as the man who sent him to report such rubbish. Anyone looking at the position with a clear head, and without bias, finds it plain enough. In spite of the damage of which your correspondent speaks, large orders, amounting to 500 cases, have been executed here at a drop of 1s. per lb. The case with which this opium was procurable has frightened the American operators, who have now completely abandoned the market. You may be sure that if the growing crop were really damaged our holders would not have accepted reduced prices, but would have stood out for more money. They know quite well that they are standing upon the threshold of an abundant crop, and they are therefore glad to unload, even at a 10 per cent. drop." The same correspondent, writing on April 7, continues to report "all's well," in the opium districts. The spring sowings, he tells us, are almost finished. They have been made on an unusually large scale, and, as rains have fallen continuously for a fortnight, the prospects are as fine as can be. From Salonica, Malatia, and Tokat we hear similar reports. Our regular correspondent, writing on April 7, "observes that the weather continues favourable for the spring sowings. We hear that the Americans will buy largely current tale quale, if the price drops to about 10s. If this is the case, we shall have an advance soon after. We consider 10s. a very safe price." The arrivals of opium from the beginning of the season to April 7 were 1,354 cases, against 4,130 in the corresponding period of 1891-92.

ORANGE-PEEL.—Holders are now selling freely, 9 packages fair to good bright *Malta* gelatine being knocked down cheaply on Friday at 6½d. to 10d. per lb.

PILOCARPIN.—The rather liberal imports of jaborand leaves that have recently taken place have not in the least reduced the price of pilocarpin. The reason is that most of the parcels of leaves lately imported do not contain enough alkaloid to make it worth the while of manufacturers to work them. The present quotations are, according to brands, from 70s. to 74s. per oz. for *hydrochlorate*, and from 70s. to 72s. per oz. for *nitrate*.

QUICKSILVER.—There have been two advances in the price this week. The first one was on Monday, when the quotation was raised to 5l. 10s. per bottle, and the second on Tuesday, when the importers put up their price to 5l. 12s. 6d. Second hands now quote 5l. 11s. 6d. to 5l. 12s.

QUININE.—The market has been very dull, 11½d. per oz. remaining the asking-price for second-hand German bulk on the spot. The last business done for delivery was at the rate of 11½d. per oz. for July. The manufacturers' prices are now as follows:—*Howards* bulk, 1s. 2d. to 1s. 3d.; vials, 1s. 3d. to 1s. 4d. per oz.; *Whiffen* bulk, 1s. 1d.; vials, 1s. 3d. per oz.; *Pelletier*, vials, 1s. 5d. to 1s. 5½d. per oz.; *Fabbrica Lombarda*, vials, 1s. 3d.; bulk, 1s. 1d. per oz. All German brands in bulk, 1s. 1d. per oz.

RHUBARB.—A further considerable quantity (about 60 cases) was sold at low rates on Friday last. *Shensi*, round medium to bold fair coat, half bricky and loose, half grey and dark fracture, realised 1s.; ditto, very little colour in fracture, 10½d. to 11d.; flat, seven-eighths pinky-grey fracture, one-eighth dark and loose, 1s. 6d. per lb. *High-dried*, round, medium to bold, rough coat, fair fracture, 6d. to 6½d. per lb.

SPIRITUOUS PREPARATIONS.—As a result of the increase in the spirit duty the manufacturers have increased their price for proof tinctures by 1d., for rectified tinctures (including liniments) by 2d., and for chloroform and ether by 3d. per lb. This is a higher rate of increase than that which has taken place in the duty, but it is justified on the

ground that no advance is made in the price of certain alcoholic preparations of lower strength than proof.

SANTONIN.—Prices are high (5s. 9d. to 6s. per cwt.), and raw material appears to be exceedingly scarce.

STAR ANISE.—Unchanged, and offering on the spot at 72s. 6d. per cwt. for genuine Chinese.

SUGAR OF LEAD is rather firmer, but there has been no actual change in the quotations.

TEA.—There was a distinct feeling of relief in the tea trade when it was known that no alteration was to be made in the duty. Enormous payments were effected at the Custom House on Tuesday and Wednesday, showing how widespread was the feeling that in spite of deficits there was a considerable possibility of a further reduction or a total abolition of the tea duty. Prices for the week are unchanged except for a further slight weakness in commonest sorts of Indian and Ceylon teas, the supply of rubbish being considerable. We are now getting near to the end of the crop of Indian teas, and most of the gardens have finished for the season, so that it's quite possible that we may see a scarcity of good teas from 10d. to finest before new teas arrive that are suited for general home trade. Such teas are in very small compass now, and the supply has to last several months.

WAX (BEES').—A parcel of 230 packages *Madagascar* beeswax was nearly all sold on Friday last at high prices, 7l. 2s. 6d. per cwt. for good bright, down to 6l. 15s. per cwt. for rather dark brown quality. *Jamaica* wax also sold well at 7l. 17s. 6d. per cwt., for fair red and orange mixed.

MARRIAGES.

BRUCE—PORTER.—At Avondale Cottage, Larkhall, Lanarkshire, the residence of the bride's brother, on April 17, by the Rev. J. D. McCullum, M.A., B.D., Established Church, William Bruce, chemist, to Mary, fourth daughter of the late David Porter, saddler, Galston, Ayrshire.

BRUNNER—MORGAN.—On April 17, at the Church of St. Mary, Boltons, by the Rev. W. T. Du Boulay, M.A., assisted by the Rev. J. T. T. Robinson, B.A., J. F. L. Brunner, eldest son of John T. Brunner, Esq., M.P., to Lucy Marianne Vaughan, daughter of Octavius Vaughan Morgan, Esq.

DEATHS.

COLEY.—On April 10, at his residence, 86 Bank Road, Bootle, James Coley. Aged 56. Mr. Coley was for many years dispenser at the Liverpool Eastern Dispensary.

HOGG.—The English colony in Paris is bereaved by the death on Saturday, April 7, of Mrs. Eleonore Hogg, wife of Mr. T. P. Hogg, the English pharmacist, rue Castiglione, and mother of Dr. Douglas Hogg, Avenue des Champs Elysées. The deceased lady was 72 years of age.

MACKAY.—On March 11, from typhoid fever, Mr. James Bunyan Lillie Mackay. Mr. Mackay was a son of the Rev. Dr. Mackay, late of Rhynie, and younger brother of Mackay of Uganda. For some time he held the appointment of Director of the School of Mines at Bendigo, was a fellow of the Chemical and Linnæan Societies of London, and was a distinguished pupil at Bloomsbury Square during the session of 1879.

THOMAS.—On Thursday, April 12, at Cowbridge, Mr. John Thomas, chemist and druggist, suddenly. Aged 72. The deceased gentleman took a great interest in the town, and represented it on the Board of Guardians for the last fifteen or sixteen years. He was also a keen sportsman, and was well known on the hunting and coursing field throughout Glamorganshire.

COTTONSEED OIL.—In 1893 there were probably 1,250,000 tons of seed crushed in the United States. Of this seed there were obtained 1,000,000 barrels of oil. It is estimated that 300,000 barrels were used in Chicago for making lard, and St. Louis, Kansas City, and Omaha took 200,000 for the same purpose. About 250,000 barrels went to Holland, for making butter, and large quantities to Southern Europe for mixing with olive oil.



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.

The Composition of Dr. Collis Browne's Chlorodyne.

SIR,—In your account of the chlorodyne case at Leeds, I am reported to have made the statement that Dr. J. Collis Browne's chlorodyne does not contain any poison. Of course, I made no such statement. I categorically denied the presence of prussic acid and several substances which might contain or develop prussic acid, and that was all.

Yours, &c.,
33 Great Russell St., W.C., HORACE DAVENPORT.
April 16.

Anti-cutting Co-operation.

SIR,—We have read Messrs. Elliman's letter in your issue of April 7, and shall be happy to lend them and any other firm really interested in securing to retailers a fair living profit our most hearty co-operation and support. We believe in a "working" profit as against a "workhouse" profit for the retailers who handle "Vinolia" soap and preparations, and in our opinion the co-operation of a few houses really in earnest in securing to the trade reasonable profits would simplify and strengthen matters very much. For one house to maintain its prices alone entails a serious and heavy tax in many ways. We sincerely trust that those large manufacturers who care a straw about the retailers will adopt Messrs. Elliman's proposal, and join hands in the matter.

Yours very truly,
Ryland Road, London, N.W., BLONDEAU ET CIE.
April 18.

Special Agencies v. Cutting.

SIR,—It is a crying shame that Messrs. Elliman, who have made so laudable an attempt to protect the trade, should not have met with more encouraging support.

Your columns have from time to time chronicled some hundreds of recipes for curing the cutting-malady, but the rabies is as much alive as ever, if not a little more so. It requires a good deal of audacity to add still another to the number, but I may perhaps be permitted to suggest that all this cutting-trouble might have been avoided if speculators in proprietaries had adopted the plan of appointing only a limited number of agents in each town—each agent to be supplied directly. This would have been a real advantage to both maker and retailer, for the agent, having in his hands a popular article, would, for his own sake, push the sale to the utmost. Under present circumstances, what retailer takes any interest whatever in disposing of goods which he is compelled to sell almost at a loss? This suggestion is made for the consideration of future prospectors in patent medicines; but, with a little trouble, I do not see why it could not be adopted to a considerable extent by some firms already in the field. If they expect chemists to interest themselves in the sale of their proprietaries, let them adopt a plan which will at once pay them to do so.

I am, yours faithfully,
WELSH CHEMIST. (18/64)

The "Daily News" Made the Statement.

SIR,—I observe that I have kindly been given credit for the success of a reception to English and American members of the International Medical Congress at the Grand Hotel,

Rome. It is but just for me to say that the credit is due to a committee of arrangements resident in Rome.

Yours truly,
Naples, April 8. S. M. BURROUGHS.

Pilula Opii.

SIR,—Surely there should be no doubt as to what is meant by this, since the B.P. gives "pil. opii" as a synonym of pil. saponis co.

Shoreham. H. G. GLASSPOOL.
[The trouble is that so large a proportion of prescribers mean pure opium when they write "pil. opii gr. j."—ED. C. & D.]

Whitworth Bottle may not be Made with Methylated Spirit.

Mr. W. Wyatt, of Lancaster, makes Whitworth bottle from the following C. & D. formula:—

	Oz.
Camphor	2
Tinct. lavand. co. ..	1
Ol. origani	1
S.V.R. to	20

Knowing that it is a practice with some chemists to make one bottle for internal use with S.V.R. and one for external use with S.V.M., he asked the Board of Inland Revenue whether this was permissible, and received a reply through the local supervisor stating that, "the Whitworth bottle being practically spirit of camphor flavoured with essential oils of lavender and thyme, the use of methylated spirit in its preparation cannot be sanctioned."

This should be noted, because in some of the formulae published in the C. & D. DIARY, 1894, methylated spirit is inadvertently ordered.

On Spanish Pharmacy.

A travelling correspondent of this journal dating from San Sebastian, writes:—"A Biscay gale last Tuesday rendered railway travelling unpleasant through the Landes (South France). Pine-trees snapped off and fell across the railway-line, while the carriage-lamps were blown out and draughts existed everywhere, so that once arrived in San Sebastian I bethought myself of cough-lozenges. The first shop that attracted my attention was marked 'Drogueria,' but a formidable array of mineral-water bottles in one window, and artists' colours in the other, made me hesitate as to whether it was the place I sought. Two very elaborate 'Farmacias' looked expensive, and bore, besides, French names. These I passed also—being in search of a genuine Spanish pharmacy—and made for a more popular quarter. Once there, I soon discovered a neatly-dressed window, with the usual bottles bearing mystic inscriptions. My knowledge of Spanish being limited, I asked, on entering the shop, for 'something good for a cough.' An assistant—who, by the way, had carefully hidden from sight any linen he might be wearing—stepped forward, but promptly called the proprietor to his aid. The latter was equally free from starchy trammels, though most polite and anxious to please. He recommended two French cough-preparations, one of which (the cheapest) I took at 7½d. The box bore a French inscription, but a Spanish note was enclosed. As a general rule I find that American and French specialties prevail over British ones, even in the North of Spain, where communication with England is so cheap and frequent; and why should Paris and New York have the bulk of the trade? The advertisements in the daily newspapers seem largely composed of announcements from these two cities. The Spanish pharmacists are not without an eye to business, for they readily offer some preparation of their own, as being the 'same thing, and much cheaper,' when you ask for any thing you happen to want. I have noticed that the pharmacies everywhere in Spain seem to bristle with surgical instruments, and articles usually kept out of sight in England are readily shown in the shop-windows. Mineral waters seem very largely used in Spain, and the sale is principally in the hands of the chemists. There is a very good chance for business, but the average Spanish pharmacist is unenterprising and will not himself do much to assist in creating a demand."

DISPENSING NOTES.

Correspondents should consult "The Art of Dispensing" in regard to dispensing difficulties. Difficulties not explained therein may be sent to the Editor, who invites a general expression of opinion upon the under-mentioned topics.

The Letters P.P.A.

Messrs. P. B. Fallon (16 Cambridge Street, W.), R. Seaton (13 Charles Street, S.W.), C. P. (London, S.W.), and F. H. Rogers (Altrincham) write to tell us that the letters P.P.A. after the directions in a prescription stand for "Phiala prius agitata." The abbreviation, Mr. Fallon says, is in pretty general use in Ireland.

Mr. Palethorpe (Ramsey, I.M.) renders it "Prius phiala agitans." He adds: "It is a senseless abbreviation, and its use should be discouraged."

Mr. Boardman (Dublin) gives it as "Phiala priusquam agitata."

Mr. Gaziello (Nice) says the letters stand for "Post Prandium amplum," a direction given by many Anglo-Continental doctors. The difficulty of this interpretation is, that the dose was to be taken "bis in die P.P.A."

Liq. Donvani c. Tr. Lavand. Co.

12/8. Dispenser asks our opinion concerning the following—when dispensed elsewhere it remained clear, but as dispensed by him a precipitate was formed:—

Liq. Donvani	..	..	..	..	5ij.
Tr. lavand. co.	..	..	..	..	5iv.
Aq. dest. ad	..	..	..	..	3vj.

M.

We presume he used distilled water; but even with that a certain amount of separation will take place on standing. There are at least two formulæ published for Donovan's solution. Which was used in this case?

Cocaine and Chromic Acid.

257/61. Trytilia had the following prescription to dispense. The previous dispenser used cocaine hydrochlorate, and "Trytilia" has had to do the same, but a flaky yellow precipitate has been the result:—

Ac. chromici	..	..	..	..	grs. iv.
Cocainæ	..	..	..	..	" iv.
Aq. destill. ad	..	..	..	..	3j.

Misce et solve.

"If the hydrochlorate is used, dissolve each solid in an equal quantity of distilled water, mix, when a yellow precipitate is formed, which on heating forms a clear, orange-coloured solution. Should the pure alkaloid be used, dissolve the chromic acid in the water, heat, and add the cocaine gradually, so that a solution may be formed.

MISCELLANEOUS INQUIRIES.

The Editor replies to queries of general interest, in the order in which they are received. Replies are inserted according to the space available. Postal answers cannot be supplied.

(Back numbers containing formulæ, educational or other specific information can be obtained from the Publisher.

726. W. P. R.—The Residue of Oil Contained in Cods' Livers, after being subjected to heat and pressure, is useless for any but lubricating purposes, and would not pay you for extra trouble. It will pay you better to sell the livers, as they are, to some artificial-manure makers, or even farmers.

72/59. Taekle.—To Bronze the Brasswork on Fishing-rods.—Sal-ammoniac, 1 drachm; oxalic acid, 15 grs.; vinegar, 1 pint. Warm the parts gently over a spirit-lamp, brush over, dry, and repeat process until the desired shade is obtained. Solutions of perchloride of platinum or antimony are also used for the purpose.

370. Myrrh.—Glycerine and Cucumber.—See page 565, October 8, 1892. Concentrated Weed-killer.—See page 775, June 3, 1893. This stands dilution in about the proportion mentioned. It takes a good deal of boiling before all the arsenic is in solution, and if a stronger solution were attempted it is apt to crystallise out. Cod-liver Oil Emulsion.—We have published numerous formulæ for this, all really good. You cannot miss them if you consult the index. Here is, however, another which will form a basis for almost any emulsion, simple or compound:—

Yolks of fresh eggs	..	..	..	..	No. 2
Cod-liver oil	..	..	..	..	15 oz.
Water to	..	..	..	..	30 oz.

Rub up the yolks in a mortar either with or without sugar; add the oil gradually, incorporating thoroughly; if it becomes too thick, thin with a little water. When all the oil has been added, add also gradually water 6 oz., so as to form an emulsion. Then add the remainder of the water with whatever additions you propose—glycerine, hypophosphites, acids, rum, brandy, &c.—mixed or dissolved in this portion.

The secret is, form your emulsion with the plain water first, then add the water containing the other ingredients.

9/37. Bengali.—To make Syr. Calcis Hypophosph. and Syr. Ferri Lact. a Rose-colour add liq. cocci or a trace of solution of rose aniline towards the end of the process. In a hot climate, such as yours, rose aniline will be the most permanent, the quantity needed being so small that it cannot do any harm. Palatable Cod-liver Oil Emulsion with Hypophosphites.—See March 10, 1894, page 369; August 12, 1893, page 264; May 13, 1893, page 668, &c. You can hardly consult an index without finding a reference. The one mentioned last is made with powdered gum acacia, which might suit you better if fresh eggs are not obtainable readily; but in preparing with gum we prefer to follow "Gerrard's process"—viz., rub up the powdered gum with the oil first, add half the required quantity of water at once, and stir until an emulsion is formed; then dissolve the hypophosphites and other ingredients in the remainder of the water, and add gradually. See also answer to "Myrrh." By the way, instead of using sweetening substances and flavouring accordingly, has anyone ever tried the addition of salt and such oils as pimento or celery?

9/37. Bengali.—Blue-black Ink.—April 1, 1893, page 466. A good ink of the old-fashioned sort may be made as follows:—Exhaust 2½ lbs. nut galls, finely-bruised, with 120 oz. water, dissolve 8 oz. copperas and ¼ oz. oxalic acid in 20 oz. water; add to the gall infusion; dissolve 2 oz. gum arabic in water. While this is being prepared, dissolve 1 oz. finely-powdered indigo in 4 oz. strong sulphuric acid, allow to stand 24 hours; add water and a little carbonate of soda: collect the precipitate and wash to free from saline particles: then add the moist precipitate to the ink; lastly, the gum mucilage. Stand at least a week, and decant. A little oil of cloves or creosote is usually added. This ink improves with age.

8/64. A. W. C.—London Purple is a compound of lime and arsenious acid, obtained as a bye-product in the manufacture of aniline dyes. It can be obtained as a powder or a liquid. You will find full particulars of its use as an insecticide in our issue of May 20, 1893, page 683. If you consult Buyers' Index in DIARY, 1894, under "Aniline Dyes" and "General Chemicals," you will have no difficulty in obtaining a quotation from some of the advertisers.

10/1. Nigger Black.—Yes, Pilocarpine would be a useful adjunct to your formula for Hair-lotion. Use 6 grs. of the nitrate to the quantity you mention, as it is the most common and most stable of its salts.

10/39. Artemisa.—The plant you send is the Do's Mercury (*Mercurialis perennis*, L.), an acrid and even poisonous plant formerly used in medicine, and sometimes used for the blue colour, like indigo, obtained from the leaves.

35/14. *E. S. D.*—Bay Rum.—See page 932, December 30, 1893; page 20, July 2, 1892; and page 768, November 28, 1891.

6/7. *H. D.*—We do not know the composition of the proprietary preparation named, but would recommend you to try the formula given at page 293 for a lubricating ointment for cyclists, with the addition of, say, 2 drachms oil of winter-green, and use 1½ oz. solution of ammonia, B.P., in place of ½ oz. strong solution of ammonia as there directed. Follow the directions given as to preparation.

9/12. *Carduus.*—There is no reason why the Cleansing-drench mentioned at page 30, "Veterinary Counter Practice," should not be given two or three days after calving, but in that case the ergot may as well be left out. A simple and efficient draught at that time after calving is equal parts of magn. sulph. and sodæ sulph. (6 oz. to 8 oz. each), with 1 oz. pulv. zingiber, mixed.

11/3. *Uncertain.*—For particulars of the Minor examination see the Educational number of THE CHEMIST AND DRUGGIST, September 16, 1893.

10/6. *J. K.*—We must refer you to the above issue.

13/12. *S. S (Smyrna).*—A Hair-restorer of the character you require can be made from the following formula:—

Sulphur	75 grains
Acetate of lead	87 "
Glycerine	½ oz.
Water to	8 "

13/41. *Cuprum* tells us that he has found the formula for a silver-cleaning preparation which we published on January 27, page 169, "most satisfactory for cleaning the brass shop-scales."

6/10. *Plated.*—Urquhart's "Electro-Plating," published by Lockwood, 5s.

42/27. *W. B.*—There is no prescribed course of training for a public analyst; but it is likely that in the near future the certificate of the Institute of Chemistry will be an almost essential qualification. The most useful books are: Dr. Bell's book on Foods (South Kensington Series); Allen's "Commercial Analysis," 3 vols., 45s. 6d.; Sutton's "Volumetric Analysis," 16s.; Wanklyn's "Treatises on Milk, Water, Tea, &c.," and "Bread," 5s. each. See the Educational Number in regard to Institute curriculum.

16/18. *W. H. O.*—Spirit. saponis kalinus (Hebra):—

Saponis virid.	3j.
Solve in—	
Spiritus vini	3j.
Spiritus lavandulæ	3j.

"Camphor phenique" is a solution of 100 parts of powdered camphor in 36 parts of pure carbolic acid and 4 parts of spirit of wine.

15/25. *Non Nomer.*—A suitable Embrocation for Veterinary Purposes.—See page 468, March 31, 1894. If for general use, reduce quantity of ol. terebinth. to 3iss.

6/20. *G. W. Bern.*—Cod-liver Oil and Malt.—We do not know the exact composition of the preparations you mention, but they are made in the course of the manufacture of the malt extract, that is before the extract is removed from the vacuum pan. The nearest in appearance and properties we have made has been by putting the extract of malt in a warm mortar, adding the oil gradually, and thoroughly

incorporating after each addition. Make the compound so as to contain 50 per cent. of oil. You can hardly expect to make on a small scale a preparation equal to that produced by apparatus costing thousands of pounds.

9/48. *Agerrir.*—Pick-me-up.—See formula, page 812, June 14, 1890; also see reference, page 239, February 15, 1890. Some pharmacists use equal parts of rectified spirit and brandy in place of part of the chloroform-water as given at page 812, but the legality of this practice is questionable. Petroleum we take to mean the fluid non-volatile oil obtained from the paraffin series, midway between the illuminating-oils and the paraffin. molle, B.P. It is fluid at most temperatures, has no smell, but exhibits a slight fluorescence. It is used frequently as a hair-oil when suitably perfumed. Cantharides are sometimes macerated in it at a gentle heat. It does not readily form an emulsion such as lime cream and glycerine, unless 1 part in 4 of a vegetable oil be added to it.

13/34. *H. M. R.*—To Whiten Golf-balls, stick on a darning needle and dip into white bath enamel. A suitable Hair-lotion.—Consult page 366, DIARY, 1894. "Wilson's Non-oleaceous" is a useful one, and a favourite in your district.

12/51. *Plate.*—We know of no method of Nickel-plating Without a Battery—at least, not one we would care to recommend. Consult a Birmingham trade-directory, when you will have no difficulty in finding a firm that will do anything of the sort quickly and much cheaper than you would be able to do it for yourself.

7/12. *Guaiacol.*—Guaiacol Carbonate has been introduced into this country as a remedy for tuberculosis. Its properties seem to be similar to creosote or salol. The dose you quote is quite correct, "from 3 to 8 grs. daily"; it has been given up to 90 grs. daily without any ill effect. It is quickly eliminated by the kidneys, and does not, as a rule, produce any stomach derangement: it rather acts as a tonic, and patients under treatment rapidly put on flesh and increase their weight. The smaller doses should be dispensed in pill or powder form; larger doses rub up and suspend as a mixture with mucilage and, say, syrup of orange. It is manufactured by Dr. F. von Heyden's firm, whose agents, Messrs. Burgoyne, Burbidges & Co., we have no doubt will be pleased to give you further information concerning its properties and administration.

10/38. *Inquirer.*—To Soften the Water from Pump, which produces the vegetable appearance in the copper boiler, you may add milk of lime, carbonate, or silicate of soda to the water in a cistern or tub. Allow to stand for twenty-four hours before putting into boiler. The water may be quite safe for cooking purposes if it is clear and does not reduce the B.P. solution of pot. permang. to which a few drops of dilute sulphuric acid has been added.

14/14. *M. K.*—There is no chemical means we know of For Taking "Lead" off Small-bore Rifles. Plenty of friction and a wad are best. A little ordinary paraffin-oil on the wad is useful at times.

11/33. *A. S.*—To Preserve the Children's Nursery Lotion, instead of using sodæ salicylas ʒiij., use ac. salicylic. ʒi, dissolved in S.V.R. 10 oz.; otherwise follow directions given. The spirit and acid will free the lotion from the excess of organic matter you complain of.

14/12. *Cordials.*—To Prevent Fermentation in Lime and Lemon Juice Cordials, dissolve about 10 or 15 grains of salicylic acid in about 4 fl. drachms of spirit, and add to each quart bottle. See also formula and remarks in DIARY, 1894.

3/54. *Corn-cure*.—It is the first time we have heard of salicylic acid and cannabis proving of no use for Corns. How will this formula suit? Arnica is of no use. Iodine might do, but it discolours the skin; with soft corns it might be useful:—

Ac. salicylici	3j.
Ac. lactici fort.	3ij.
Zinci chloridi	3ss.
Colloidium ad	3j.

M.

10/32. *Poorahnah*.—The Action of Dioxide of Manganese as an Emmenagogue we cannot explain. It has been prescribed in doses of from 3 to 10 gr., in pills made with syrup, and taken three or four times a day. Pot. permanganat. in 1 or 2 gr. doses seems to be the favourite method of administering manganese for this purpose, and is very useful. If the dioxide is to be used, special care must be taken as to its purity.

12/7. *J. H.*—To Prevent the Corks Absorbing all the Perfume from 1d. Bottles, make solution of hard paraffin in benzole, dip corks in this, and dry upon a flat tray.

18/23. *W. J. T.*—Combined Toning and Fixing-bath for Gelatine Chloride Paper:—

Hyposulphite of soda	8½ oz.
Citric acid	2 drs.
Acetate of lead	3 "
Sulphocyanide of ammonia	7 "
Alum	2 "
Chloride of gold	15 grs.
Water	14 oz.

20/2. *Optimus*.—There is a goodwill attached to a business which may be regarded as an investment; that is to say, a business which may fairly be expected to run of itself. One which only returns a bare living to the man who works hard at it is not worth anything for goodwill. No one can say much about goodwill without being familiar with all the circumstances. If the buyer wants to buy as much as the seller wants to sell, it would be a fair reckoning that stock should be taken at cost price less, say, 10 per cent. for depreciation. Fittings are generally sold outright, but landlord's fixtures have to be let with the premises. The buyer does not often take over book debts; he never should do so unless he is in a position to know all about them. You are unwise, we think, not to avail yourself of the experience of a good agent.

20/32. *W. W.*—Gelatine Basis for Copying, &c.—See formulæ under "Hectograph Composition" at page 366 in DIARY, 1894. Certain makers add sulphate of barium, or even common whiting, to give a marble appearance to the slab. You will also find other formulæ on reference to back numbers.

13/74. *H. S. F. B.*—Legg on "Urine-testing," reviewed on page 424 of this volume, will suit you.

21/18. *Testudo*.—On page 362 of our issue of March 10 you will find a trade note on yellow, green, and red vegetable colours, which are used, amongst other purposes, for colouring perfumery. For violet colour *Liquor violæ*, made direct from violets, is used.

20/68. *Westgate*.—Cheese Rennet.—Use the formula in the DIARY, page 362, but make the Essence double strength.

20/67. *Indicus*.—At any of the metropolitan schools which advertise in THE CHEMIST AND DRUGGIST a woman-dispenser can obtain instruction for the Apothecaries' Hall Assistants' certificate. For full information see our last Educational number, September 16, 1893.

21/12. *Eureka* is troubled with his White Oils. The formula which he uses is as follows:—

Yolks of 12 eggs.

Soft soap	3v.
Spirit of turpentine	3xij.
Camphor	3v.
Strong solution of ammonia	3vj.
Eucalyptus oil	3ij.
Spirit	3viij.
Water	6v.

Break up the eggs and soft-soap in a mortar, and gradually work-in half the water; then add camphor dissolved in the spirit, the eucalyptus oil, spirit of turpentine, and the acid (*sic*) diluted with the rest of the water.

We presume that acetic acid is meant, but it does not occur in the recipe quoted, and is better out. "Eureka" also mentions "yolk of egg," but the yolk and white are always used. There is too much water in the formula: it should be "Water to Oiv." Otherwise proceed as follows:—Dissolve the soap, eucalyptus oil, and camphor in the spirit and turpentine; beat up the eggs with a pint of water (the eggs should first be thoroughly switched); then add the solution of soap gradually, shaking well all the time. Finally, add the ammonia, previously diluted with the water required to make the whole up to half a gallon. The liniment thickens on keeping.

22/10. *Electric*.—Ordinary Electric-bell Batteries are charged with a saturated solution of sal ammoniac. See p. 61 of the current volume.

INFORMATION SUPPLIED.

For this section we are always glad to receive from subscribers brief notes on practical subjects, recipes which have been found good in practice or which have required modification, and hints or fresh ideas on any pharmaceutical or trade matter.

Lime-juice Glycerine—I have tried the formula you kindly published for "Lime-juice Glycerine" containing lime-juice, and find that if nut oil be used instead of ol. amygd. it is better to increase the quantity to 14 oz.

LIMES. (16/26)

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, post-card replies to the following:—

- 13/27. Makers of plaster-spreading apparatus.
- 20/28. Makers of white ink.
- 23/3. Makers of safety bottles or corks for carbolic acid.
- 23/7. Makers of salt-rock rings for veterinary use.

Next Week.

Meetings, &c., to be held, and business to be transacted thereat. Suitable notices will be inserted in this section if received by the Editor on or before Wednesday.

Tuesday, April 24.

Royal Institution of Great Britain, at 3 P.M. Professor J. A. Fleming on "Electric Illumination."

Wednesday, April 25.

Three Towns and District Chemists' Association. Assistants' Section. Social evening.

Society of Arts. Ordinary meeting, at 8 P.M. "Some Recent Developments of Photographic Chemistry." By Chapman Jones, F.C.S. Captain W. de W. Abney, C.B., F.R.S., will preside.

Friday, April 27.

Royal Institution of Great Britain, at 9 P.M. Professor H. Marshall Ward on "Action of Light on Bacteria and Fungi."

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HIGHEST AWARD, CHICAGO, 1893.

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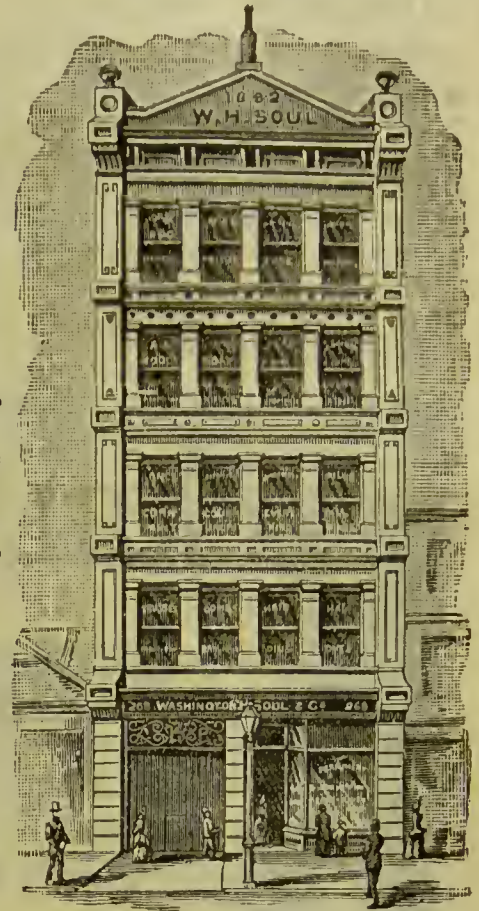
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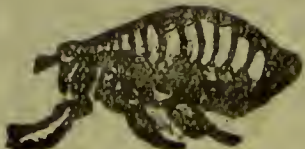
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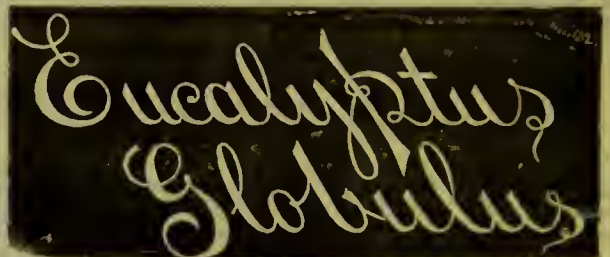
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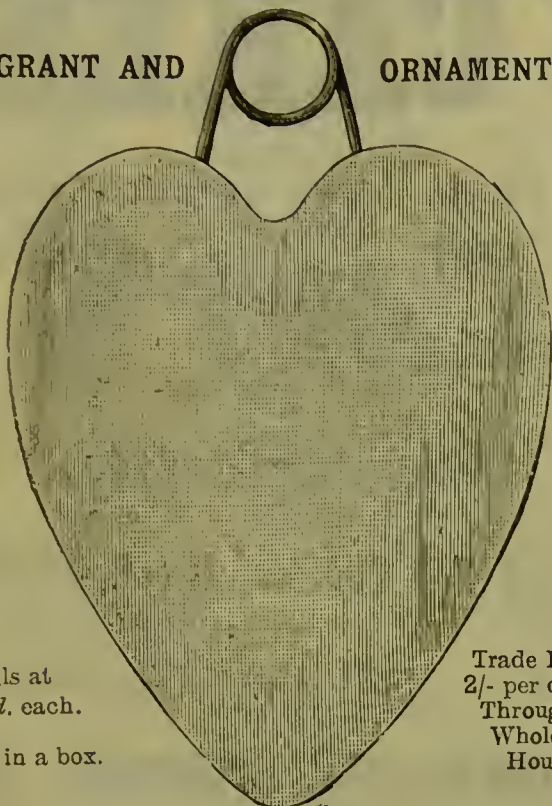
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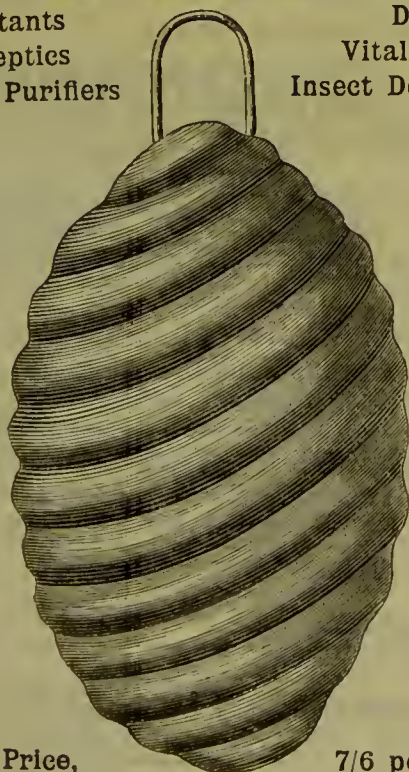
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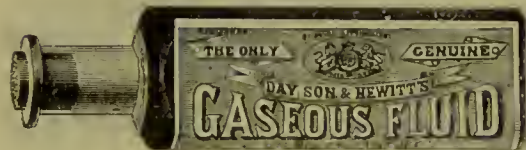
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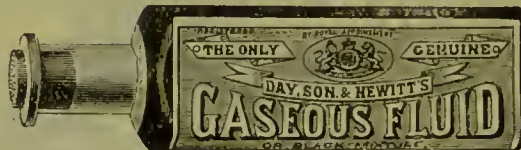
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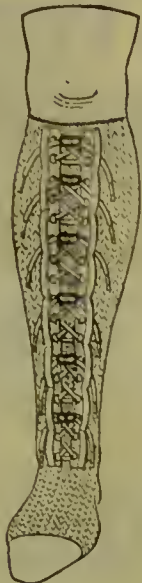
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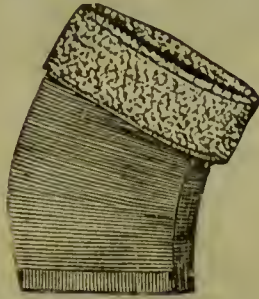
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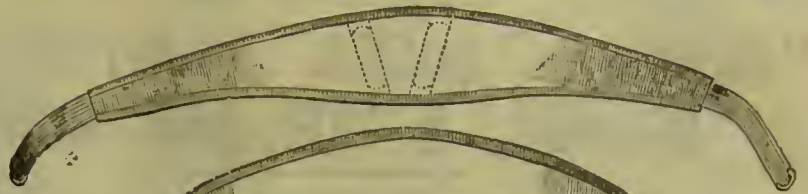


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1A. Thick ..		10 1/2	3	7/6
8. Thin, for leg and knee ..		14	3	7/6
7. Thick ..		14	3	9/6
9B. Thin, for leg and thigh ..		21	3	10/6
9A. Thick ..		21	3	13/6

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VINCENT WOOD'S SURGICAL APPLIANCES.

THE LARGEST MAKER IN THE WORLD.

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CORNS or BUNIONS. A GOOD LINE FOR CHEMISTS.

IT WILL PAY TO STOCK AND PUSH OUR FAMILY
BOOT STRETCHERS

They will win the gratitude of customers and profit for yourselves.
Worked by powerful screw action. Three Brass Corn and Bunion Pieces,
which can be adapted to Relieve Pressure of Boot on any part of the Foot.

WILL STRETCH OR BLOCK ANY SIZE.



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THE FAMILY BOOT STRETCHER.

EACH.

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TERMS ON APPLICATION. [1]

LESLIES' PLASTERS

Leslies' Patent Pliable Tape-plasters, Fine Calico, Holland, or Pink
Cambric, in decorated Tin Boxes, 1/2, 1, and 1 1/2 in. wide, 1s. each,
9s. per doz.; extra widths, 2 in. and 3 in., 1s. 3d. and 1s. 6d. each.

Tapes, Silk, 3/4 in., 1s. each, 9s. doz.; 1 in., 2s. each, 18s. doz.

Leslies' Surgical Case Tape Plasters (assorted widths), 10s. 6d.

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Tins, 6 in. wide, 3s. and 5s. 6d.

Leslies' Porous Plasters (easily removed), in 1 and 3 doz. boxes.
7 1/2 by 5 in., or in 1 or 6 yard decorated Tins.

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**LESLIES' LINT, ABSORBENT WOOL, BANDAGES,
AND ALL SURGICAL DRESSINGS.**

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SOFT SILK FLEXIBLE CATHETER, GUARANTEED WITH WOVEN EYES.

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SHEETINGS.

PINK
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FABRICS, ETC.

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CLOTHS.

WATER-
PROOF
LINT.

Victoria Indiarubber Mills, EDINBURGH.

Samples, &c., on application.



Circular Violet-Powder Box.



Menthol-Cone Box.



Marking-Ink Box.



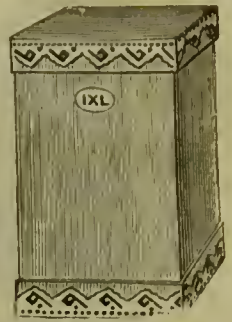
Homoeopathic Bottle Case.



Camphor Roll Box.



Boxwood Camphor Roll.

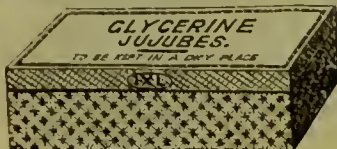


Pedestal Violet-Powder Box.

TO CHEMISTS AND OTHERS USING BOXES IN ANY QUANTITIES.



Panelled Jujube Tin.



Decorated Jujube Tin.



Oriental Lozenge Box.



Fancy Drop-Lid Seidlitz Box.

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Manufacturers by Steam Power

OF EVERY DESCRIPTION OF

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IN WILLOW, PAPER, AND CARDBOARD.

A LARGE STOCK ALWAYS ON HAND.

Samples and Estimates on Application.

If you are introducing any Novelty, or if you have any Box or Boxes of which you use any considerable number,

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Enclosing your patterns and stating the quantities you require; estimates will be at once sent you free of charge.

A GREAT SAVING WILL BE EFFECTED.

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TELEPHONE No. 423.

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149 & 153

DUKE STREET;



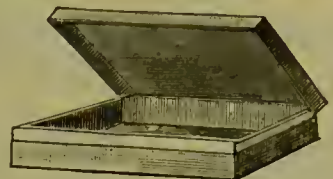
FACTORIES:

62, 64 & 66

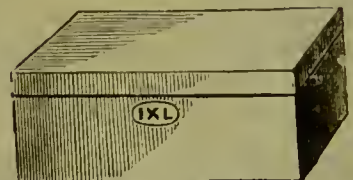
PARR STREET

AND

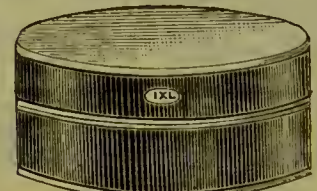
Back Colquitt St.



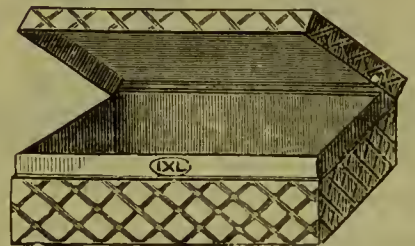
Potash-Pellet Box.



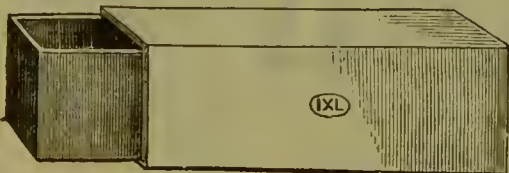
Plain Jujube Tin.



Oval Cardboard Lozenge Box.



Hinged Seidlitz-Powder Box.



Plain Powder Slide.



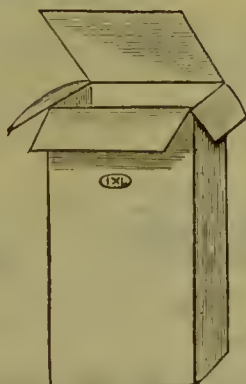
Bronze Powder Slide, White Edges.



Cosmetic Case.



Insect-Powder Tin.



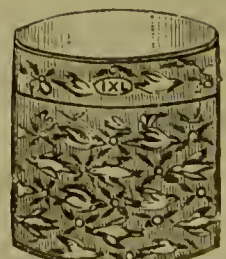
Arrowroot Case.



New Style Insect-Powder Box.



The IXL Insect-Powder Box.



Round Fullers'-Earth Box.

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One Cwt.,
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for 17/-

17/-

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car. paid,
for 17/-

THIS CRUSHED LINSEED IS SPECIALLY PREPARED FOR CHEMISTS' USE.
The Finest Seed only is used. Before crushing it is as thoroughly cleaned
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One Cwt., Carriage Paid to any town within 200 miles of
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Special Terms for 5 cwt. lots and upwards.

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Seed Crusher,

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GUARANTEED ABSOLUTELY PURE.

NO OIL EXTRACTED, NO BUFFAM ADDED.

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Samples Free. Feeding Linseed a Speciality.

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the Trade may require,
can be obtained on
application to

Allen & Hanburys,

BETHNAL GREEN,
LONDON,

Who are the Sole Bottling
Agents for the Manufac-
turers.

INDEX AND BUYERS' GUIDE

See pages 23-25.

W. SUTTON & CO.,

76 CHISWELL STREET (late 10 Bow Churchyard), LONDON,

SOLE MAKERS OF THE

ORIGINAL BATEMAN'S DROPS & DAFFY'S ELIXIR.

Proprietary Medicines, Perfumery, Mineral Waters, Lozenges, Druggists' Sundries, and Miscellaneous Articles.

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MANUFACTURE THE FOLLOWING SPECIALITIES—

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- "STIPENDUM" OPENERS, for Stoppered Aerated-water Bottles.

"STIPENDUM" GREASE-PROOF COVERED POTS,
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The Grease-Proof Covered Pots have perfectly-fitting lids, are practically unbreakable, and the only articles really answering the purpose intended.
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R. H. BARRETT'S PATENT CAPPED BOTTLE



THE ONLY REALLY PERFECT BOTTLE FOR VASELINE, POMADES
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Telegraphic Address—"FOREFRONT LONDON."



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From Stores
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the works.

THE NEW SHAPE FLATS,

With rounded edges, or the ordinary kind, plain or graduated.

3 and 4 ounce 8/- per gross.
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WHITE MOULDED PHIALS.

½ oz. 1 oz. 1½ oz. 2 oz.
3/6 .. 3/9 .. 4/6 .. 5/3 per gross.

PANEL BOTTLES.

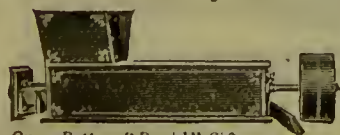
2 oz. 4 oz. 6 oz. 8 oz.
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SPECIAL NOTICE.—Six gross and upwards of assorted sizes sent Carriage Free to any part of England. Smaller quantities not carriage paid. Sample Bottle sent free on application.

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Established 50 Years Bankers—London and Westminster Bank.

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Illustrations on page 225, CHEMIST AND
DRUGGIST, January 27? IF SO
you will see that



Open-Bottom "Rapid" Sifter.
can handle DRY POWDERS of every kind & quantity.

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"RAPID"
SIFTER & MIXER**

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OIL PUMP

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OIL, TIME, MONEY.

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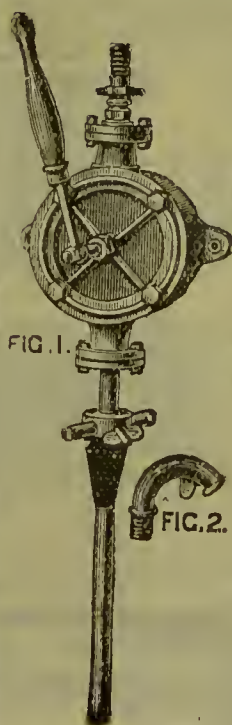


FIG. 2. We have bought the Stock of these Pumps from
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Who have given up this part of their business,
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We hold a Good Stock, and can give
Prompt Delivery.

Write for full particulars and prices of The "Farrington"
Patent Oil Pumps to

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34 & 36 Southwark Street,
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PRIZE MEDAL,
International
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IN RUBY, BLUE, AMBER,
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OPAL GLASS.

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International
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Mr. Matterson, Day and Night Chemist.
Mr. Bateman, Finchley Road.
Messrs. Thomas Brothers, Cheltenham.
Mr. Chabot, Tunbridge Wells.
Mr. Francis, Carmarthen.

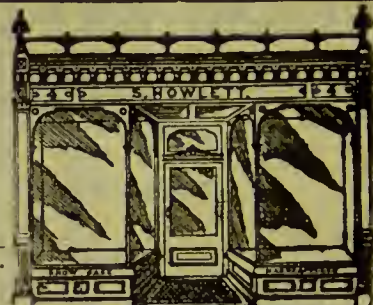
Mr. Pettinger, Hampstead.
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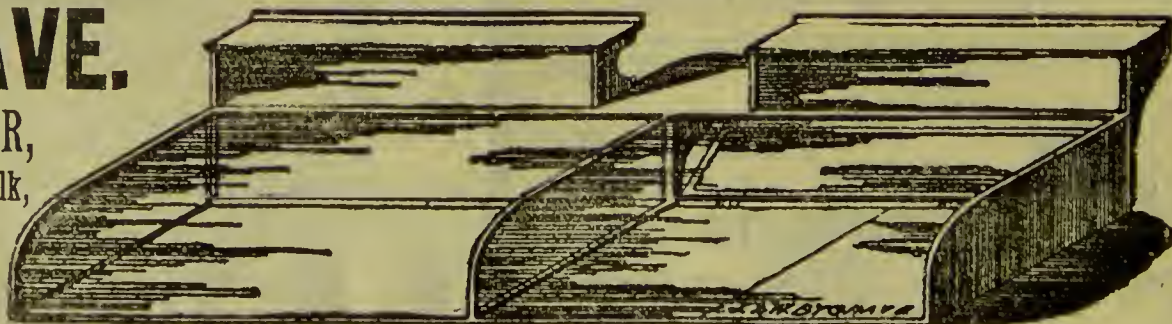
CABINET FITTER to the Pharmaceutical Society of Great Britain.

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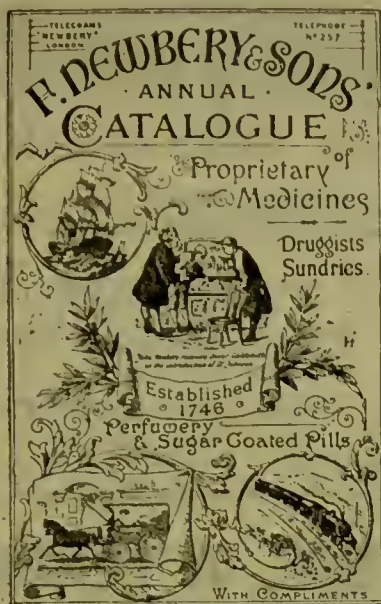
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And JONES CHUCKLED!!



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doubled. We are all indebted to the Makers,
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PRICE 14/-
per doz. nests of 6
Boxes, planed and hinged,
from 5 1/2" x 2 1/4" x 1 1/4" to
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Special Terms for Large Quantities to Shippers.

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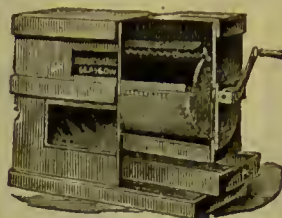
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IMPROVED

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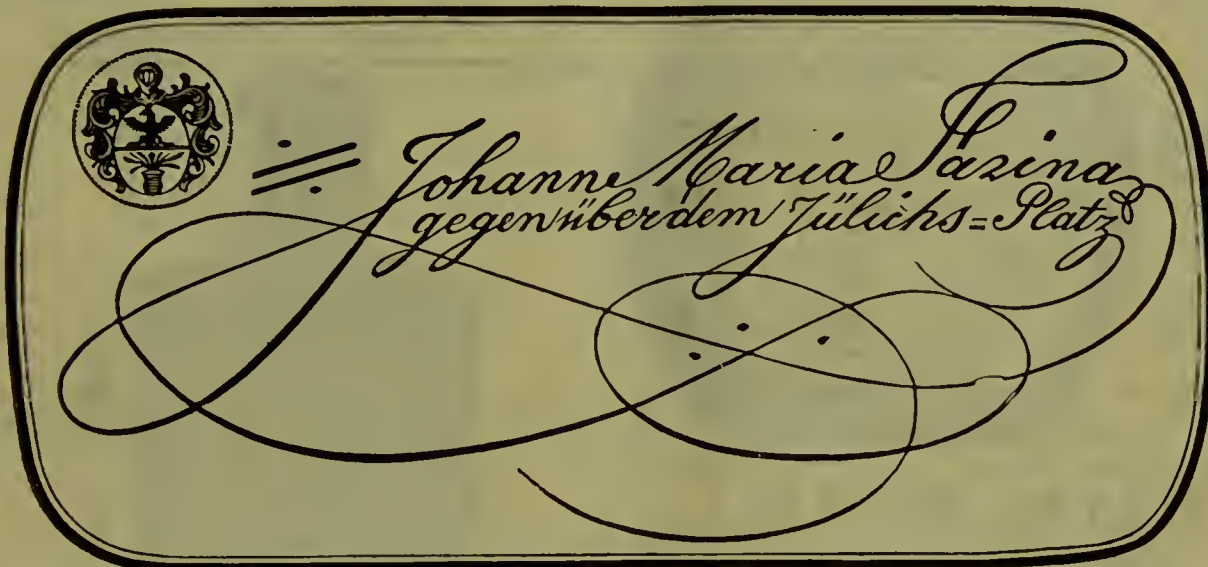
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I only prepare one quality of Eau de Cologne. This quality never varies in the slightest degree, and there has not been the smallest change in the manufacture since the year 1709, when it was invented by my ancestor.

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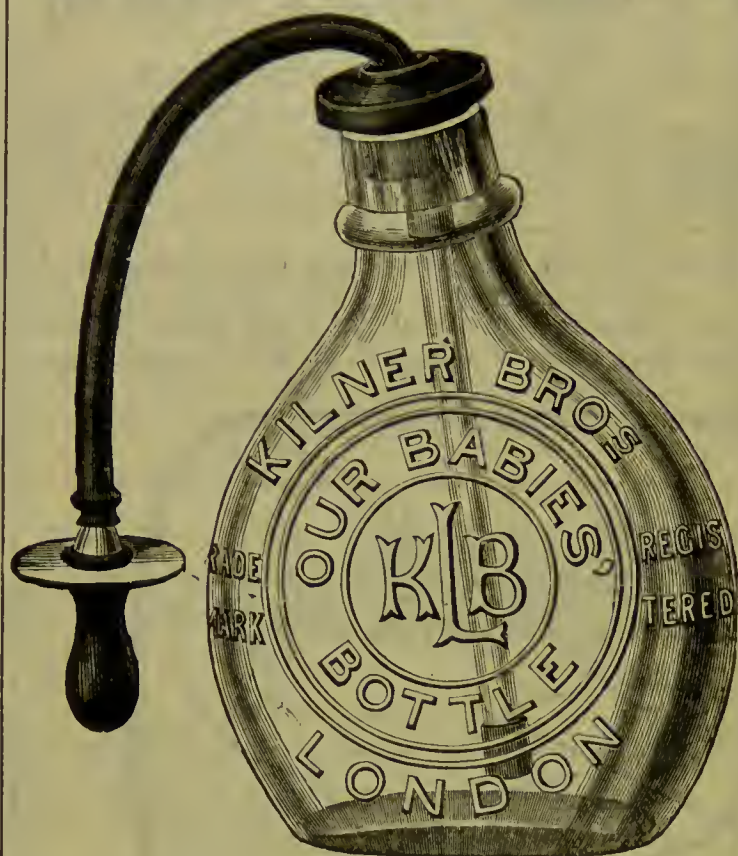
No. 1	Long Green Flasks	12 bottles	} to one dozen.
" 2	Short White Bottles	12 "	
" 3	Double ditto	6 "	
" 4	Wickered Bottles (small)	8 "	
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China tops	1/6 per gross extra.		
64.—Green Bottles, Glass Screw Stoppers,			
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White Glass	3/- per gross extra.		

per gross.

These prices include 1 doz. partitioned Wood Boxes. If Bottles are loose 1/9 per gross less.

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7/6	9/6	10/9	13/6	16/-	21/6	26/-	per gross.

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2	3 and 4	6 and 8	10	12	16	20	ounce.
9/3	10/9	12/-	18/-	18/-	21/6	27/-	per gross.

ORDINARY TINT, SECOND QUALITY.

2	3 and 4	6 and 8	10	12	16	20	ounce.
6/8	8/-	9/6	12/-	13/6	18/9	21/6	per gross.

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2	3 and 4	6 and 8	10	12	16	20	ounce.
7/3	9/-	10/3	12/9	15/-	20/-	24/-	per gross.

WITH MAW'S TRADE MARK , SUPER.

2	3 and 4	6 and 8	10	12	16	20	ounce.
9/-	10/3	11/6	17/6	17/6	21/-	26/-	per gross.

ORDINARY TINT, SECOND QUALITY.

2	3 and 4	6 and 8	10	12	16	20	ounce.
6/6	7/6	9/-	11/3	12/6	17/6	20/-	per gross.

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Yours faithfully,

THOMAS KEATING.

KEATING v. WRIGHT (NEWCASTLE).

MR. JUSTICE NORTH, on the 14th February this year, in giving Judgment, said: "There was no difference in principle between verbal representations and representations in writing for the purpose of passing off goods of one person as those of another. . . . He therefore granted an Injunction to restrain the Defendant from selling or offering for sale, as Keating's Insect Powder, powder not made by the Plaintiff, and ordered the Defendant to pay the costs of the action."

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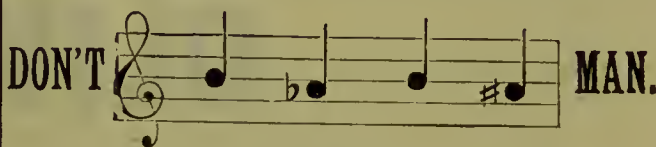
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MANUFACTURERS.

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Specially designed for use where space is an object, and for those having a large retail trade, such as Chemists, Hospitals, Restaurateurs, Hotel Proprietors, &c. They are ready for work immediately, require no fixing, and produce Aërated Waters of the very highest quality at a minimum of cost.

NO DANGER. NO MESS. PERFECTLY RELIABLE.

NOTE.—These Machines are not toys, but thoroughly well-made Machines, and will last many years with hard working. We guarantee to produce a better article with these than any other system adapted for using the Liquefied gas, and at a lower pressure, thus effecting an immense saving in broken bottles, and also reducing risk of accidents.

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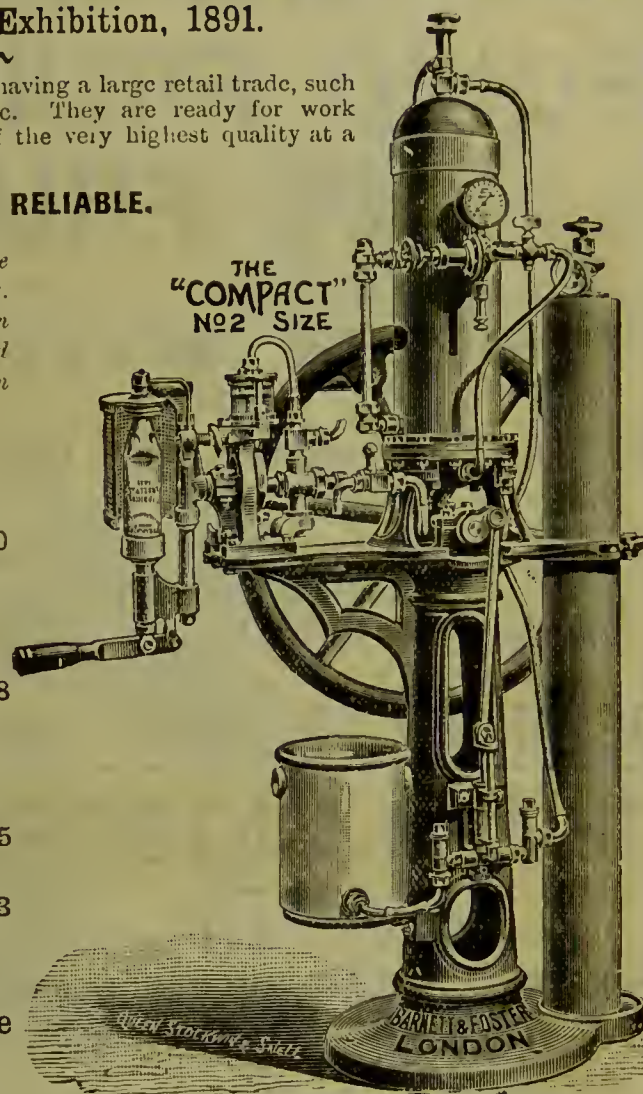
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Or without Syrup Pump to Turnover Machine
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Producing Capacity by Hand-power 200 doz. per day.

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**NATURAL PALATABLE HUNGARIAN
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The favourite prescription of the Medical Profession, as more palatable and reliable than any other Water for cases of Habitual Constipation, Hepatic Congestion, Obesity, Catarrh of the Stomach, Atony of the Bowels, and especially for Women before and after Accouchement.

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The Genuine Label has Black lettering with Blue Border on White Ground

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In 26-oz. Bottles, 10/- per doz.

Prepared with HOWARDS' Sulphate of Quinine.

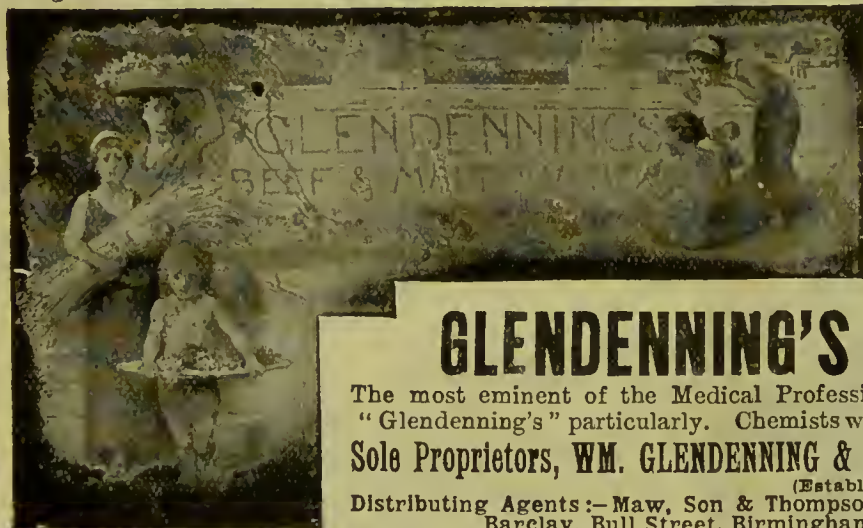
The Chemist and Druggist says:—"Messrs. STEPHEN SMITH & Co., of Bow, E., are putting on the market an orange-quinine wine in wine-quart bottles. It is made according to the British Pharmacopœia, and they have sent us a sample, which we have examined critically. The orange-wine from which the preparation is made is of a pale-brown colour, good orange odour, and contains 7 per cent. of soluble matter other than quinine. This is mainly sugar. Its alcoholic strength we find to be equal to 25 per cent. proof spirit, or 11·8 per cent. by weight of alcohol, so that it is of the higher standard recognised by the Pharmacopœia. The alkaloidal value of the wine is also satisfactory. Three ounces of it yielded 2·3 grains of ether-soluble alkaloid, equal to 2·7 grains of sulphate of quinine, and allowing for experimental loss and the usual cinchonidine content (not extractable by ether) it will be seen that the wine has obtained not only the pharmacopœial *quantum*, but that it has lost little of it by tannic precipitation."

HIGH CLASS SHERRY, B.P., for Pharmaceutical purposes and Drinking, 6/6 per gall., 16/- per doz.

EXTRA PALIDO SHERRY, delicate Dry Wine, 7/3 per gall., 18/- per doz.

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FINEST PREPARATION OF

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We use Alto Douro Port Wine, Kepler

Extract of Malt and Beef Jelly, con-

taining 53.40 Albumen.

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The most eminent of the Medical Profession constantly do us the honour of prescribing "Glendenning's" particularly. Chemists who stock our preparation find their sales increase.

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PURE ORANGE WINE

(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopœia.

MOST SUITABLE BASIS FOR QUININE AND OTHER MEDICATED WINES.**A. MILLAR & CO., DUBLIN; and 47 MARK LANE, LONDON, E.C.**

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			Per gross.	Extra quality.				Per gross.	Extra quality.	
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Square Glass Stoppered Bottles, containing nearly 1/2-pint Imperial, 42/- per gross. Sample Bottles at 7/- per gross.

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ESTABLISHED OVER 200 YEARS.

IS NOT ADULTERATED.

NONE GENUINE WITHOUT THE

TOWER TEA

HIGHEST AWARD, PARIS, 1889.

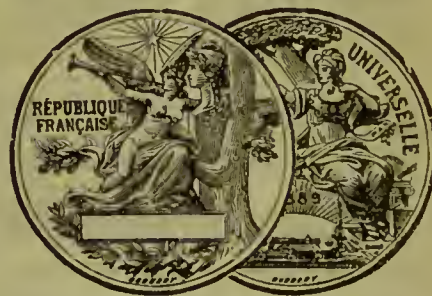
Analysts by the "LANCET," December 20th, 1890:—

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Delicious Custards without Eggs. In Boxes, 2d., 6d., & 1s. each.

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" GINGER	WINTER EXTRACT
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RASPBERRY	LEMON SQUASH
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SEMPER-DULCIS OR EVER-SWEET,
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GRASSE (FRANCE)**FRENCH ESSENTIAL OILS:**Neroly, Lavender, Geranium, Orris, Patchouly, Thyme,
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AT THE HIGHEST POSSIBLE SATURATION.

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FOR OACHOUS AND LOZENGES.**FRENCH PERFUMES**OUR WELL KNOWN AND VERY SUPERIOR COMPOSITIONS
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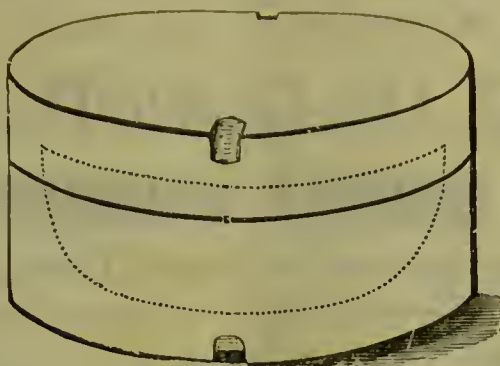
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A HANDSOME COUNTER MAHOGANY SHOW CASE

Given to any Chemist buying 1 cwt. of above Lozenges. Price 1/- per lb. net.

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"TOP NOTE PRODUCERS."

The immensely increasing demand for these Lozenges, and their wonderful popularity, is entirely due to their intrinsic merits, not only as producers of a fine clear voice, but as an effectual remedy for all Chest Affections. Sore Throats, arising from cold, seem to disappear as if by magic; Tickling in the Throat or Hoarseness is removed by allowing a few Lozenges to gradually dissolve in the mouth; indeed, Debility and Weakness of the Vocal Organs are unknown to those who regularly use these valuable Lozenges. Sold in 1/1½ and 2/9 Boxes.

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The most delightful and delicately perfumed Lozenge ever produced; have an immense sale.

With 4 lbs. of these Lozenges we give one of Mellin's Patent White-glass Silver-top Screw-stoppered Bottles.

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DIGESTIVE DINNER TABLETS,

Composed of Bismuth, Cardamom, Soda, Rhubarb, Ginger, &c.

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Very palatable and unusually attractive.

Packed in Tins, each containing 3 doz., 6 doz., or 12 doz. Cakes. Retail at One Penny each.

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Contain Calomel, Jalap, and Santonine (flavoured with Raspberry), are palatable and very effective.

As they will keep in any climate, a steadily increasing demand is made for them for EXPORT.
Put up in 3-doz., 6-doz., and 1-gross Tins. [1]

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British Paper Co. 50	Glover, C. H., & Co. 55	Moss, J., & Co. Text 546	Sutton, W., & Co. 52
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CLASSIFIED LIST OF ALL ADVERTISERS

Those whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear in the preceding Index are published in one of the other issues of this month.

ACETIC ACID

Lorenz, H.
Morris & Callard (Salts)
Pickard, W. & Co.

ACIDS

Boulton, J., & Co., Lim.
ADVERTISING
SPECIALITIES
Oaspar & Co., Lim.
Corsan, J. R.
Lawton, J. W. | Sears, F. W.

AERATED MINERALS

Apollinaris Co.
Barnett & Foster
Burroughs, Wellcome & Co.
Chemists' Aerated Waters
Association, Lim.
Ellis & Son (Kathin)
Franz Josef
Idris & Co., Lim.
Ingram & Boyls
Jewsbury & Brown
Johanna Co.
Levico Water
Kimmond & Co.
Mills & Co. (Bourne)
Oberbrunnen

BITTO PLANT

[See SYRINGS AND BARKS.]

Barnett & Foster
Bratby & Hinchliffe, Lim.
Evans, Sons & Co.
Rylands, Dan, Lim.
Tyler, Hayward, & Co.
AGROINS ABROAD
Australian Drug Co.
Boissy
Kempthorne, Prosser & Co.
Lennon, B. G., & Co. (N.Z.)
Parodi, Demarchi, & Co.
Peake, Allen & Co.
Prosser, Taylor & Co.
Soul, W. H., & Co.

ALKALOIDS

Howards & Sons (Cinchona)
Macfarlan, J. F., & Co.
Smith, T. & H., & Co.

AMMONIA

May & Baker, Lim.
White, A., & Sons
Woolley, Sons & Co.

APPARATUS

Bennett, Sons & Shears
Berend, O., & Co.
Christy, T., & Co.
Pothe, H., & Co.

ARROWROOT

Evans, Sons & Co.

BAKING POWDER

Goodall, Backhouse & Co.

BANDAGES

Bailey, W. H., & Son
Robinson & Sons
Behntse, F., & Co.
Wood, Vincent

BATH & FLESH

GLOVES

Barclay & Sons, Lim.
Chemists' Association, Lim.
Glover & Son
Maw, S., Son & Thompson
Pattison, G. | Solport Bros.
Wood, Vincent

BICARB. SODA

Brunner, Mond & Co., Lim.
Howards & Sons
May & Baker, Lim.

BISMUTH PREP.

Hearon, Squire & Francis
Hewlett & Sons
Howards & Sons
May & Baker, Lim.
Sykes & Co., Tyrer, T., & Co.
White, Alfred, & Sons

BOOKS

Hargreaves, Dr., M.D.
Lewis, H. K.
Squire, P.

BORAX

Howards & Sons
Mack's Starch

BOTTLES

Alre & Calder Bottle Co., Lim.
Barnett & Foster
Barrett, R. H.
Bratby & Hinchliffe, Lim.
Evans, Sons & Co.
Gilbertson, H., & Sons
Hearn, Wright & Co.
Isaacs & Co.
Johnsen & Jorgensen
Kilner Bros.
Maw, S., Son & Thompson
Pothe, H., & Co.
Rylands, Dan, Lim.
Stipendium Stopper Co., Lim.
Toogood, W.
Youldon, E.

BOXES

Anstin & Co. (Cardboard)
Ayrton & Saunders
Evans, Sons & Co.
Kent, G. B., & Sons
Kilner Bros.
Robinson & Sons
Rylands, Dan, Lim.

BRUSHES

Crowden & Garrod
Evans, Sons & Co.
Kent, G. B., & Sons

BUNSEN BURNERS

Berend & Co.

BUTTER COLR. &c.

Boulton, J., & Co., Lim.
Crawshaw & Co.
Tomlinson & Hayward

CACHOUS

Bleasdale & Co.
Blyton, Astley & Co.
Jackson, T. | Baines & Co.
Warrick Bros.

CAMPOR

Fuerst Bros. | Howards & Sons

CAPSULES

Denoual, J. (Medicinal)
Duncan, Flockhart & Co.
Evans, Sons & Co.
Hooper, B., & Co.
Lloyd, T. Howard, & Co.
Lothhouse & Saltmer
Parke, Davis & Co.
Richardson, John, & Co. (Lei-
Warrick Bros. (easter), Lim.

CARBOLIC ACID

Mason, C. E., & Co.
Wandsworth Chemical Works,
Lim.

CASA SAGRADA

Anderson & Co.
Duncan, Flockhart & Co.
Evans, Sons & Co.
Farris & Co. | Moss, J., & Co.
Parke, Davis & Co.
Stearns, F., & Co.

CATION OIL

Allen & Hanbury
Christy & Co. (Aromaticum)

CERESINE WAX

Boehm, Fredk.

CHALK, PRECIP.

Levermore, Aug., & Co.
Morrison, R., & Co.
Nicholls, G. W.

CHARCOAL

Bragg, J. L. (Biscuits)
CHECK TILLS
O'Brien, Thos.
Stokes, G. K., & Co., Lim.
Voucher Check Till Co., Lim.

CHEMICALS

Berger, Kahler & Co.
Boehm, Fredk.
Boehringer, O. F., & Sohrs
Boulton, J., & Co., Lim.
Brunner, Mond & Co., Lim.
Fletcher, Fletcher & Stevenson
Goodall, Backhouse & Co.
Hill, A. S., & Son [Clarke]
Hodgkinson, Treasurer
Howards & Sons (Pharm.)
Jones, Jno.
Lothhouse & Saltmer
Lorenz, H.
Macfarlan, J. F., & Co.
May & Baker, Lim.
Morris & Callard | Moss & Co.
Smith, T. & H., & Co.
Tyrer, P., & Co.
Washington Chemical Co.
White, A., & Sons
Zimmermann, A. & M.

CHEST PROTECTS

Hockin, Wilson & Co.
Liverpool Patent Lint Co.
Maw, S., Son & Thompson
Newbery, F., & Sons
Pattison, G.
Schutze & Co. | Solport Bros.
Wood, Vincent

CHLOR. OF LIME

Government Sanitary Co.
Hebdon, W. C.
National Chemical Co.

CHLORODYNE

Blyton, Astley & Co.
Davenport (Blowne's)
Towle, A. P., & Son

CHLOROFORM, &c.

Duncan, Flockhart & Co.
Macfarlan, J. F., & Co.
Smith, T. & H., & Co.
Wright, Layman & Umney.
Zimmermann, A. & M.

COCA & CHOCOLATE

Cadbury Bros. | Christy & Co.

COCA WINE

Armbricht, Nelson & Co.
French Hygienic Soc.
Lorimer & Co.
Stephen Smith & Co. (Hall's)

COCAINE HYDRO.

Howards & Sons

COD-LIVER OIL

Allen & Hanbury
Bleasdale & Co.
Burroughs, Wellcome & Co.
Evans, Sons & Co.
Hill, A. S., & Son
Hookin, Wilson & Co.
Lorimer & Co.
Oppenheimer, Sons & Co., Lim.
Richardson, J., & Co., Lim.
Robinson & Co.
Smith, T. & H., & Co.
Woolley, Sons & Co.
Wright, Layman & Umney

COFFEE

Allen & Hanbury (Essence)
White, Fairchild & Co.

COLAPSE TUBES

Betts & Co.

COMP. MEDICINE

Allen & Hanbury
Blyton, Astley & Co.
Burroughs, Wellcome & Co.
Hooper, B., & Co. | Leo & Co.
Lloyd, T. Howard & Co.
Parke, Davis & Co.
Richardson, J., & Co., Lim.

CONCENT. LIQRS.

Fletcher, Fletcher & Stevenson
Lloyd, T. Howard & Co.
Richardson, J., & Co., Lim.

CORN CURES

Gardner, C.
Fattison, G. | Solport Bros.

COTTON WOOL

Haynes, G., & Co. (Absorbent)
Lindner & Co.
Robinson & Sons (Absorbent)
Sanger, J., & Sons

CRASH LINSSEED

Morgan, G. H.
Mumford, G. S.
Sizer Bros.

DENTIFRICES

Beecham, T.
Bronnley, H., & Co.
Hanson, O.
Jewsbury & Brown
Lakeman, J. J.
Robertshaw, H. A., & Co.
Sutton, O., & Co.
Warwick Bros. | Wilson, A.
Woods, W. (Arecia Nut)

DENTISTRY

Stevens, P. A.

DISINFECTANTS

Barclay & Sons, Lim.
Beedler & Co.
Drysedale, J. W., & Co.
Dunsek Bros. & Co.
Elephant Disinfectant Co.
Hebden, W. U.
Government Sanitary Co.
Isal
Jeyes' Sanitary Compounds Co.
Mason, C. E., & Co.
May & Baker, Lim.
National Chemical Co.
Ness & Co.
Sanitas Co., Lim.
Seabury & Johnson
Tyrer, T., & Co.
Wandsworth Chemical Works, Lim.

DOG MEDICINES

Spratt's Patent, Lim.
DRUGS
Allen, S., & Sons (Grinders)
Graf, F.
Morris, E., & Co.
Richardson, J., & Co., Lim.
(Grinders)

DRUGGISTS' SUN.

Ayrton & Saunders
Barclay & Sons, Lim.
Belden, E. & W.
Chemists' Association, Lim.
Crowden & Garrod
Evans, Lescher & Webb
Evans, Sons & Co. (Savars)
Fawcett, T.
Fordham, W. B., & Sons, Lim.
Gilbertson, H., & Sons
Hookin, Wilson & Co.
Kay Bros., Lim.
Maw, S., Son & Thompson
May, Roberts & Co.
Newbery, F., & Sons
Quelch, H. C.
Sanger & Sons | Schutze & Co.
Tidman & Son | Toogood, W.
Tunbridge & Wright
Wood, Vincent | Woolf, E.
Young, J.

DRY-SALT-TRIES

Browning, J. H., & Co.

DYES, &c.

Ayrton & Saunders
Crawshaw & Co.

EAU DE COLOGNE

Farina, J. M.
Muhlen, F.

ELECTRIC APPAR.

Darton, F., & Co.
Gent & Co.

EMBOCATION

Day & Sons
Elliman, Sons & Co.

ENEMAS

Barclays, Lim.
Evans, Sons & Co.
Sanger & Son
Wood, Vincent

ENGRAVERS

Caspar & Co., Lim.
Corsan, J. R.

ESSENCES

Boulton, J., & Co. (Lim.)
Bratby & Hinchliffe, Lim.
Burgoyne, Burdidge & Co.
Bush, W. J., & Co.
De Carle & Son
Fletcher, Fletcher & Stevenson
Goodall, Backhouse & Co.
Idris & Co., Lim.
Lorimer & Co.
May & Baker, Lim.
Newball & Mason
Rylands, Dan, Lim.
Stevenson & Howell
Tyrer, P. (Anchovies)
Tyrer, T., & Co.
Woolley, Sons & Co.

ESSENTIAL OILS

Allen, S., & Sons
Barrett, A. A.
Boehm, Fredk.
Brummerstedt & Liders
Bush, W. J., & Co.
Oatler, Walker & Co.
Dodge & Co.
Evans, Sons & Co.
Hodgkinson, Treacher & Clarke
Lambert, S., & Co.
May & Baker, Lim.
Poppelreuter, W.
Ransom, Wm., & Sons
Richards & Bert
Rylands, Dan, Lim.
Sosis & Andrioli
Stevenson & Howell
Symes & Co.
Treat, R. C.
Warwick Bros.
Wright, Layman & Umney

ETHER

Duncan, Floekhart & Co.
Howards & Sons
Macfarlan, J. F., & Co.
May & Baker, Lim.
Robbins, J., & Co.
Tyrer, T., & Co.
White, A., & Sons
Woolley, Sons & Co.
Wright, Layman & Umney

EUCALYPTUS

J'ownie B.I.P. Co.
Drysedale, J. W., & Co.
Evans, Lescher & Webb
Laughland, Mackay & Baker
Tasmanian Eucalyptus Oil Co.

EXTRACT MEAT

Armour & Co.
Brand & Co.
Idris & Co. (Viking Co.)
Liebig Co.
Liquor Carnale Co., Lim.
Mason, G., & Co., Lim.
Wyeth, J., & Brother

EXTRACTS, FLUID

Allen & Hanbury
Allen, G., & Co.
Burgoyne, Burdidge & Co.
Evans, Sons & Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire & Francis
Hooper, B., & Co.
Lloyd T., Howard, & Co.
Moss & Co.
Parke, Davis & Co.
Potter & Clarke
Ransom, W., & Son
Richardson, J., & Co., Lim.
Wright, Layman & Umney

EXTRACTS, SOLID

Allen, G., & Co.
Ransom, W., & Son

FEEDG BOTTLES

Burroughs, Wellcome & Co.
(Thermo Safe)
Chemists' Association, Lim.
Evans, Sons & Co.
Hearn, Wright & Co.
Hookin, Wilson & Co.
Kliner Bros.
Marriot, E., & Co.
May, Roberts & Co.
Maw, S., Son & Thompson
Surrey Packing Co.

FILTERS

Fordham, W. B., & Sons, Lim.
Mawson Filter Co.

FILTERG PAPERS

H. C. Quelch

FLY PAPERS

Buchan, D.
Strong, Christy
Tidman & Sons
Tunbridge & Wright

FOOD (Infants' & Invalid's)

Allen & Hanbury
Benger's Food
Brand & Co.
Brown & Polson
Chibnall, H. B.
Evans, Sons & Co.
Goodall, Backhouse & Co.
Hearon, Squire & Francis
Liebig Co. | Lorimer & Co.
Mason, G., & Co., Lim.
Mellin's Food | Nestlé, H.
Ridge, Dr. | Tyrer, P.
Viking Food Co.
Wyeth, J., & Bro.

GELATINES

Astley Cooper & Co.

GINGER ALE

Mills, R. M., & Co.
Ross & Sons (Lim.)

GLYCERINE

Blyton, Astley & Co. (Pastilles)
Boehm, F. | Fink & Co.
Fuerst Bros.
Price's Candie Co., Lim.

GOLD-BEATERS' SKIN

Gates, T. & T.

GOUT & RHEU-MATIC PILLS

Bromley, C.

GRANULAR PREP.

Bishop, A., & Sons
Blyton, Astley & Co.
Evans, Sons & Co.
Hearon, Squire & Francis
Lloyd, T. Howard, & Co.
Richardson, J., & Co., Lim.
Wright, Layman & Umney

GUM

Fink & Co. (Arabic, &c.)

HAIR PREP.

Cassie & Co.
Chesebrough Co.
Edwards & Co.
Truedt, H. F., Lim.

HERB BEER EXTS

J'ssop, R. H., & Co.
Newball & Mason
Potter & Clarke
Schmidt, Karl

HOMOEOPATHIC

Keene & Ashwell
Leath & Ross
Watson & Wates

HYPOPHOSPHITES

Duncan Floekhart & Co.
Fellows
Fletcher, Fletcher & Co.
Lorimer & Co. | Symes & Co.
Tyrer, T., & Co.

INHALERS

Burroughs, Wellcome & Co.
Hookin, Wilson & Co.
Toogood, W.

INK

Bewley & Draper, Lim.

INSECTICIDES

Lorimer & Co.
Sandford & Sons
Steiner & Co.
Stevenson & Howell

IRON, REDUCED

Berger, Kahler & Co.

KETCHUP

Tyrer, P.

KOLA PREPRTN

Christy, T., & Co.

LARD

Ewen, J., & Sons

LEMON SQUASH

Kemp & Son

LIME JUICE

Evans, Sons & Co.
Lorimer & Co.

LINT

Lindner & Co.
Liverpool Lint Co.
Maw, S., Son & Thompson
Newsome, C.
Robinson & Sons

LIQUORICE

Cooper & Co.
Dennis Di Luggo & Co.
"Solazzi"

LIQUORS

Fletcher, Fletcher & Stevenson
Oppenheimer, Son, & Co., Lim.

LOZENGES

Allen & Hanbury
Blyton, Astley & Co.
Gibson, R., & Sons (Manfrs.)
Guest, T., & Co.
Hill & Son | Lorimer & Co.
Ramos, O.
Richardson, J., & Co., Lim.
Warwick Bros.

MACHINERY

Bennett, Sons & Shears (Lim.)
Burroughs, Wellcome & Co.
Carter, T. H.
Gardner, W.
Hookin, Wilson & Co.
Martin Perls & Co.
Ohlson, A. | Pindar, J. W.
Werner & Pfeiderer (Snead
ing and Sifting)

MAGNESIA

Bleasdale, W., & Co.
Duncan, Fuller & Co.
Evans, Sons & Co.
Henry, T. & W. (Oleined)
Hill, A. S., & Sons
Lorimer & Co.
Washington Chemical Co.

MALT EXTRACT, &c.

Allen & Hanbury
Anderson & Co.
Burroughs, Wellcome & Co.
(Kieper's)

Hearon, Squire & Francis
Leconte, Eugene
Lorimer & Co.
Moss, J., & Co.

Oppenheimer, Sons & Co., Lim.
Ramos, O.
Ramos, Clark & Co.
Richardson, John, & Co. (Leicester), Lim.

Robinson & Co.

MARKING INKS

Bond, John (Crystal Palace)
(Ink and Pencils)

MEDICINE CHSTS

Burroughs, Wellcome & Co.
Day, Son & Hewitt (Veterinary)
Day & Sons (Veterinary)
Richardson, J., & Co., Lim.

MENTHOL

Burroughs, Wellcome & Co.
Christy, T., & Co.
Evans, Sons & Co.
Hookin, Wilson & Co.
Maw, S., Son & Thompson
Shirley Bros. | Tyrer, P.

MERCURIALS

Howards & Sons
May & Baker, Lim.
Tyrer, T., & Co.

METH. SPIRITS, &c.

Boord & Son | Burrough, J.
Jones & Co.
Phillips, G., & Co.
Smith, S., & Co.
Warren A. & J.

METHYLENE

Robbins, J., & Co.

MICROSCOPES

Darton, F., & Co.

MILK

Nestlé, H. (Condensed)

MORPHIA

Macfarlan, J. F., & Co.
Smith, Bertie, & Co.
Smith, T. & H., & Co.

OILS, PAINTS, VARNISHES, &c.

Browning, J. H., & Co.
Fox, W., & Sons
Matthews, H., & Co.
Pinchin, Johnson & Co.

OINTMENT BASES

Burgess, E., jun.
Burroughs, Wellcome & Co.
(Lanoline)
Chesebrough Co. (Vaseline)
Christy, T., & Co.
Lanoline
Lloyd, T. Howard, & Co.
Richardson, J., & Co. (Leicester), Lim.

OPHTHALMIC

Pomies, E. (Powders)

OPIUM

Hop, R.

OPTICIANS

Botwright & Grey
Darton, F., & Co.

OTTO OF ROSE

Warwick Bros.

OXIDE OF ZINO

Hubbuck, T., & Son, Lim.

PAT. MEDCNS, &c.

Anglo-American Drug Co.
(Lim.) (Preserv.)
Atkinson & Barker (Infant)

Barclay & Sons, Lim.
Beecham, T. (Pills)
Bow's, Dr., Liniment
Bromley, O. (Gout & Rheu.)
Chemists' Association, Lim.

Clarke's Blood Mixture
Edwards & Son
Evans, Lescher & Webb
Fassett & Johnson
Fenning (Powders)
Goodall, Backhouse & Co.
Holloway (Pills and Oint.)
Hovenden & Sons
Lalor (Phosphodyne, &c.)
MacKenzie, Dr. (Catarrh Cure)
May, Roberts & Co.
Newbery, F., & Sons
Popular Remedies Mfg. Co.
Roberts & Co. (Foreign)
Rooke, Dr., Lim.
Sutton, W., & Co.
Warner, H. H., & Co., Lim.
Wilson, A. (Butter's Nerve)

PEPPERMINT OIL

Rush, W. J., & Co.
Ransom, W., & Son
Stevenson & Howell

PEPSIN, &c.

Armour & Co.
Burroughs, Wellcome & Co.
Chassaing & Co.
Fletcher, Fletcher & Stevenson
Newbery, F., & Sons (Ingluvin)
Stern, G. & G.
Warner & Co. (Ingluvin)

PERFUMERY,
FANCY SOAPS

Barclay & Sons, Lim.
Bleasdale & Co.
Blondeau & Cie. | Boehm, F.
Blyton, Astley & Co.
Brummerstedt & Liders
Burroughs, Wellcome & Co.
Bush, W. & J., & Co.
Chemists' Association, Lim.
Chesebrough Co.
Evans, Sons & Co.
Ewen, J., & Sons
Farina, J. M.
Greensill & Son
Hovenden & Sons
Lanollie | Muhlen, F.
Newbery, F., & Sons (Bardes)
Pears, A. & F., Lim.
Potter & Clarke
Price's Patent Candle Co.
Sosis & Andrioli
Tidman & Son | Treat, R. C.
Truedt, H. F., Lim.
Warwick Brothers
West, T. (Okeil's Mona)
Woolley, Sons & Co. (Powder)
Wright, Layman & Umney

PEROX. OF HYDR.

May & Baker, Lim.
Robbins & Co.

PETROLEUM

Allen & Hanbury
Barclay & Sons, Lim.
Dee Oil Co., Lim.
Snowdon, Sons & Co.

PHARM. PREPS.

Allen & Hanbury
Armour & Co.
Bates Bros.
Sarron, Harveys & Co.
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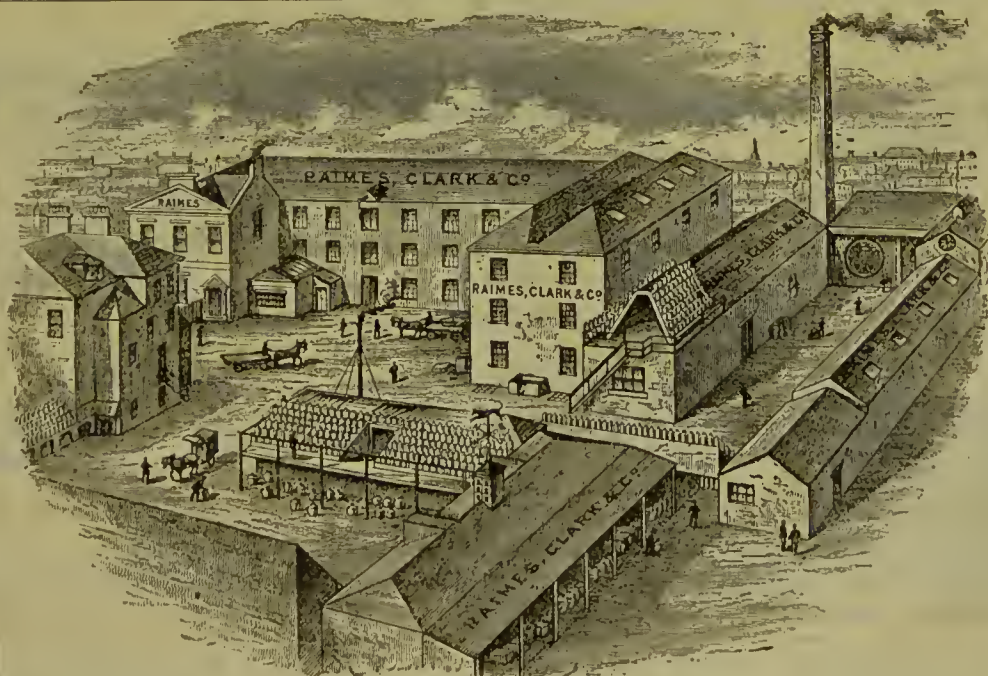
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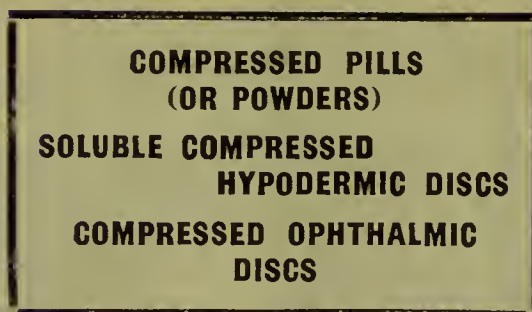
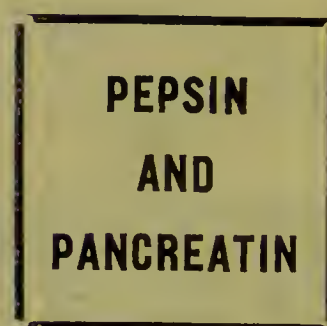
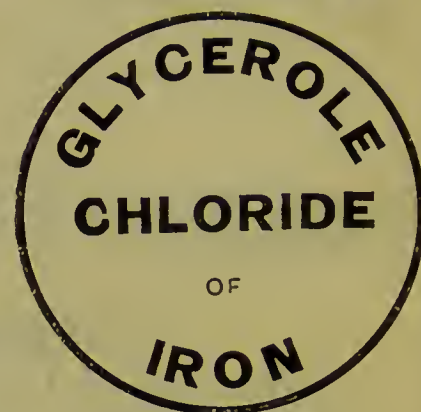
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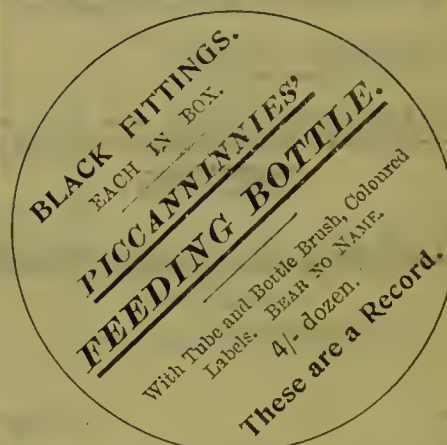
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THYROID GLAND 'TABLOIDS.'

The immediate recognition given to their therapeutic effects, and the striking results obtained, unquestionably fully account for the preponderating importance of the Thyroid Gland "Tabloids."

It may not be amiss to reproduce some of the matter which has appeared within a very recent date in the leading medical journals.

Some three months ago we pointed out in the pages of the medical journals that the "Tabloid" method of thyroid medication presented several advantages over any other form, in that it secured perfect uniformity and full activity. The increasing employment of "Tabloids" both in hospital and private practice, and the enormous call made upon our resources when the perfect efficacy of "Tabloids" began to be widely appreciated and acknowledged, proved too much for our even then extensive source of supply, and in a number of cases we were obliged to delay execution of orders. However, we have so greatly increased our facilities that we are glad to be able to say that we are now in a position to meet the most extensive demand, and to execute orders without delay. The number of reports of cases which have been published in the medical journals in which "Tabloids" have been administered with the most striking results is too large for repetition. Recent issues of the *British Medical Journal* contained some remarkable cases in which Thyroid Gland "Tabloids" had been administered. The successes recorded in cases of Psoriasis have undoubtedly been the means of inducing many practitioners to try the effect of the "Tabloids" in various affections of the skin, and many inquiries have been received by us from pharmacists in various parts of the country with regard to these "Tabloids." On previous occasions we have dealt minutely with the criticisms aimed at preparations of the whole-gland substance as compared with extracts, and we are glad to be able to supplement our remarks on those occasions by the following, which appeared in the *British Medical Journal*, December 9, 1893, p. 1267. In his lecture to the College of Physicians, London, Professor Greenfield said:—"The only satisfactory observation I have made on a healthy subject was one in which dried 'Tabloids' were given. The glycerine extract had proved inert in this and other cases."

TAKE ANOTHER CASE.

Again, in the *British Medical Journal*, January 6, will be found a report of a case under the care of Dr. Raven, of Broadstairs, in which the most extraordinary improvement was shown under Thyroid Gland "Tabloid" treatment (see pages with photographs). It was demonstrated at a meeting of the Medical Society that the variable results produced by extracts were due probably to the uncertain and far from uniform strength of the different extracts. It was pointed out a few days ago, at a meeting of one of the London

societies, that great variation had been noticed in the effect of different batches of the same extract, due possibly to variation in the glands themselves, and depending possibly upon the condition as well as the sex of the animals from which they were obtained. The reliability of "Tabloids" and their uniform character and effects may be explained by the fact that a very large number of glands is dealt with in one batch, so that the composition of the whole mass after pulping becomes well averaged; hence, were it possible to estimate exactly by means of a really accurate quantitative test, it would undoubtedly be shown that each "Tabloid" contained an almost identical quantity of the active principle or principles.

A COMPARISON BETWEEN THYROID "TABLOIDS" AND THYROID EXTRACTS.

In the February number of the *Edinburgh Medical Journal* the transactions of the Chirurgical Society of Edinburgh contain a paper by Dr. Byrom Bramwell on a case of Psoriasis treated by thyroid feeding. The patient, a girl aged seventeen, had suffered from the disease for two and a half months before she came under Dr. Bramwell's care (on September 7, 1893), and had been treated for six weeks in one of the wards of the Infirmary by a variety of external and internal remedies without any improvement taking place. From September 13 to October 14 moderate doses of a thyroid extract were administered in 5, 10, 15, and 20 minim doses (on September 13, 20, 27, and October 5); the result was distinct, but not marked, improvement. On October 14 another brand of extract was then substituted for the first (which had run short), in 1, 2, 3, 4, and 5 drachm doses, the latter dose (said to be equal to 5-8 of a gland), being continued from November 8 to 25. During the time that the patient was taking the second brand of extract there was slow improvement; it seemed to come to a standstill about November 14, and many new patches of eruption developed on the scalp. On November 20 the patient was placed for four days on milk diet, and a dose of Cascara ordered each night, for the bowels had been constipated. The milk diet was continued till, on November 25, Burroughs, Wellcome & Co.'s "Tabloids" of the whole gland were substituted for the liquid extract, and immediately afterwards a notable improvement took place. One, two, three, four, and finally five "Tabloids" were given per diem. On December 20, when the patient was shown to the Society an immense improvement had taken place. She is now (January 15) quite well, the skin being beautifully soft and healthy all over the body.

The question of "Tabloids" of Thyroid Gland *versus* uncertain extracts is thus well answered.

Thyroid Gland "Tabloids" are supplied to the Trade in bottles of 100, at 24/- per dozen bottles.

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